

DOCUMENT RESUME

ED 207 189

EA 013 968

AUTHOR Yin, Robert K.; And Others
TITLE Case Studies of Three Interorganizational Arrangements.
INSTITUTION Abt Associates, Inc., Cambridge, Mass.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Apr 81
CONTRACT 400-79-0062
NOTE 155p.; Not available in paper copy due to color of paper used in original document. For related document see EA 013 969.

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Agency Cooperation; Case Studies; Credibility; Elementary Secondary Education; *Intermediate Administrative Units; Interprofessional Relationship; *Organizational Communication; *School Districts; State School District Relationship; User Satisfaction (Information)
IDENTIFIERS Educational Improvement Center South NJ; *Knowledge Production and Utilization; Network Analysis; Northern Colorado Educational Board Coop Services; User Needs; Wayne County Intermediate School District MI

ABSTRACT

As part of their study of interorganizational collaboration, researchers present three detailed case studies of how regional education agencies (REAs) supply knowledge utilization services to the school districts they serve. The three REAs are the Wayne County (Michigan) Intermediate School District (with 36 districts), the Educational Improvement Center-South in New Jersey (144 districts), and the Northern Colorado Educational Board of Cooperative Services (six districts). Each case study describes the REA and its knowledge utilization activities, the interorganizational arrangements for knowledge utilization services, the outcomes of the services, and the reasons why the services are used. The knowledge utilization services examined fall into four areas, including information retrieval, linking agent assistance, staff development, and general organizational issues. Analysis of the services' levels of use indicates that the Michigan and New Jersey REAs are more successful than the Colorado REA. The reasons for this difference have more to do with service credibility, interpersonal ties, responsiveness to user needs, mutual exchanges, and external financial resources and less to do with compliance with state laws (except in New Jersey), formal interorganizational agreements, or conflict reduction among the participating organizations. (RW)

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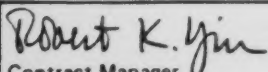
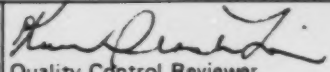
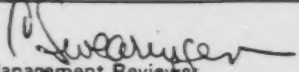
ED207189

Case Studies of
Three Interorganizational
Arrangements

Robert K. Yin,
Margaret K. Gwaltney, and
James Molitor

April 1981

Contract No. 400-79-0062

 Contract Manager	 Quality Control Reviewer	 Management Reviewer
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EA 013 968

PREFACE

The purpose of this study was to determine how collaborative arrangements among state departments of education, regional education agencies, and local school districts work to improve schools. The study focused on three exemplary arrangements, in order to learn why these interorganizational arrangements were successful.

The study is reported in two parts. The first part^{*} contains a description of the entire study, a synthesis of the findings, and a discussion of the policy implications and suggestions for future research. The present part contains the case studies of each of the three interorganizational arrangements.

The National Institute of Education (the Research and Educational Practice unit within NIE's Dissemination and Improvement of Practice program) provided the support for the study under Contract No. 400-79-0062. The main authors of each case study are as follows: Robert K. Yin wrote the case study of the Wayne County Intermediate School District; Margaret K. Gwaltney wrote the case study of the Educational Improvement Center-South; and James Molitor wrote the case study of the Northern Colorado Educational Board of Cooperative Services.

^{*} Robert K. Yin and Margaret K. Gwaltney, Organizations Collaborating to Improve Educational Practice (Cambridge, Massachusetts: Abt Associates, 1981).

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CASE STUDY NO. 1:
THE WAYNE COUNTY
INTERMEDIATE SCHOOL DISTRICT

I. INTRODUCTION

The purpose of this first case study is to describe and explain knowledge utilization activities in the Wayne County Intermediate School District (ISD). The information for the case study is based on documents obtained throughout 1979-80, and on field interviews conducted in March and October, 1980. The case study first gives the general background to the Wayne interorganizational arrangement (Section I), then describes the functions and outcomes for three specific knowledge utilization services (Section II), and finally analyzes the reasons for the success of these services (Section III).

The Wayne County ISD

The Wayne County ISD is a governmental unit that administers public educational services. Organizationally, the unit connects the Michigan Department of Education (MDE) with the 36¹ local school districts (LEAs) in the Wayne County area. The LEAs include the city of Detroit and its surrounding suburbs (see map in Figure 1), and the large area and population served made the Wayne ISD the third largest regional education agency (REA)² in the United States (Levis, 1979). The total budget amounted to about \$54 million in 1980 (see Table 1).

¹ There are 36 LEAs if Detroit is counted as a single LEA. Because Detroit has some centrally administered schools (central region) and 8 decentralized regions, the LEA may be counted as 9 separate districts, in which case the Wayne ISD could be said to serve 44 LEAs.

² There is considerable variation in the names used for these agencies (e.g., intermediate service agencies, educational service agencies, and regional educational service agencies). We have selected the term "REA" as the most appropriate parallel to the prevailing use of "SEA" and "LEA", which refer to state and local education agencies, respectively.

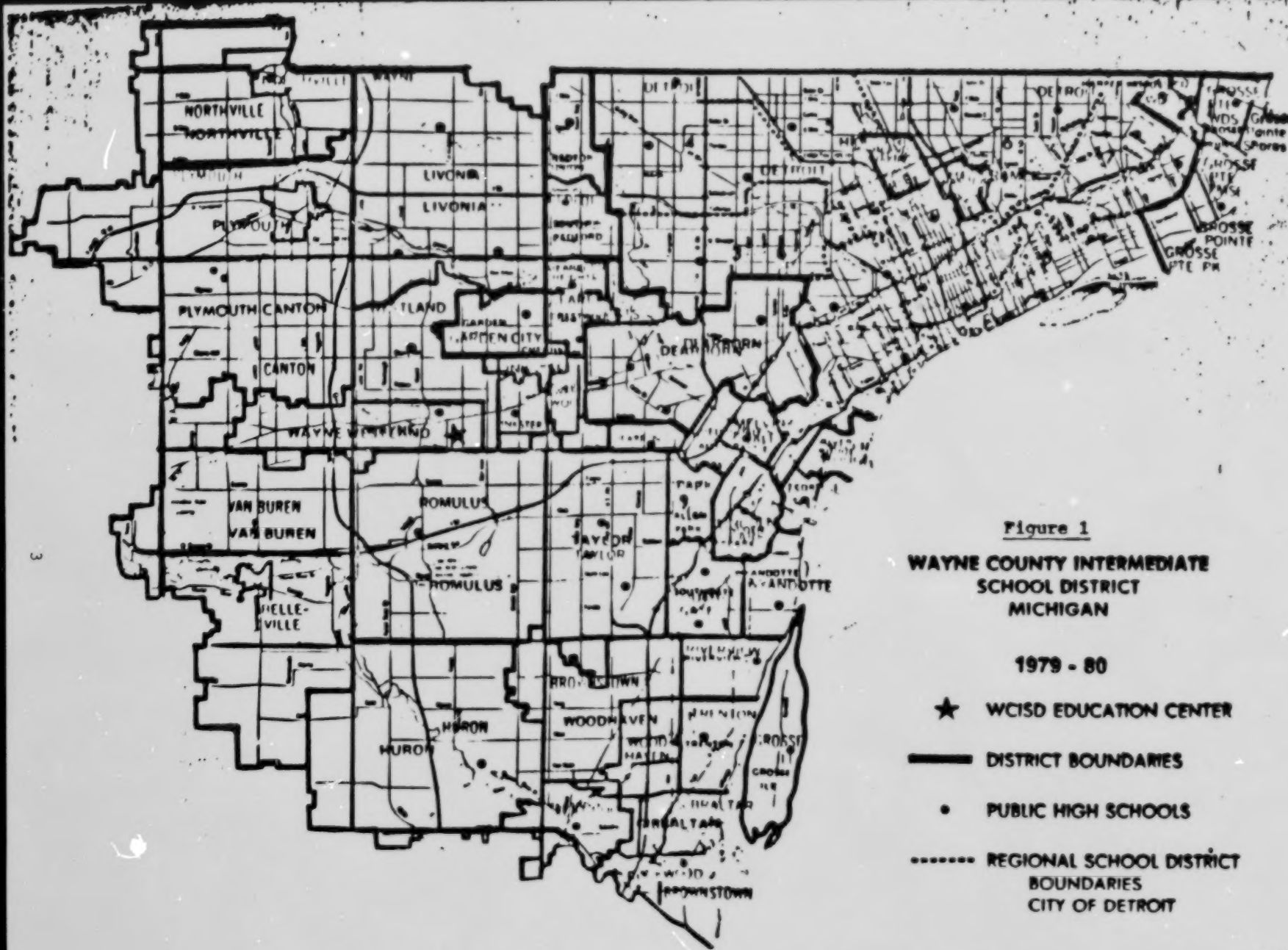


Figure 1

WAYNE COUNTY INTERMEDIATE
SCHOOL DISTRICT
MICHIGAN

1979 - 80

★ WCISD EDUCATION CENTER

— DISTRICT BOUNDARIES

• PUBLIC HIGH SCHOOLS

----- REGIONAL SCHOOL DISTRICT
BOUNDARIES
CITY OF DETROIT

Table 1

BUDGET SUMMARY

	1979-80 Actual	1980-81 Approved Budget	1981-82 Preliminary Budget
REVENUES			
General Fund	\$ 5,016,135	\$ 4,974,169	\$ 4,805,717
Building and Site Fund	568,215	150,000(a)	50,000
Debt Retirement Fund	1,941,648	2,078,957	1,871,713
Special Education - One Mill Fund	20,115,676	20,589,983	20,589,983
Coop-Data Processing Fund	1,993,590	2,187,000	2,203,000
Head Start	2,597,678(b)	2,779,428	2,779,428
Special Education - Operational Programs	6,086,611	3,970,917	3,951,534
Special Projects	14,478,787(c)	17,558,435	17,558,435
Total Revenues	<u>\$52,798,340</u>	<u>\$54,288,889</u>	<u>\$53,809,810</u>
EXPENDITURES			
General Fund	\$ 4,634,981	\$ 4,974,169	\$ 4,805,717
Building and Site Fund	1,403,606	2,500,000(a)	1,000,000
Debt Retirement Fund	1,849,076	1,898,900	1,871,713
Special Education - One Mill Fund	20,914,398	20,589,983	20,589,983
Coop-Data Processing Fund	1,715,529	2,187,000	2,203,000
Head Start	2,597,678(b)	2,779,428	2,779,428
Special Education - Operational Programs	6,086,611	3,970,917	3,951,534
Special Projects	14,476,442(c)	17,558,435	17,558,435
Total Expenditures	<u>\$53,678,321</u>	<u>\$56,458,832</u>	<u>\$54,759,810</u>

(a) Expenditures funded from previous years fund equity

(b) Unaudited amounts

(c) Includes projects which were not funded for 1979-80 and 1980-81

SOURCE: Wayne County ISD, 1980

The Wayne ISD is one of 58 such regional units covering the state of Michigan (see the state map in Figure 2). These units were established by Public Act 190 of the 1962 Michigan state law, to replace the single-county school systems that had existed for over one hundred years (Thomas, 1968). The 1962 law defined ISDs as units that had to serve at least 5,000 students; the legislation also provided state aid for operating the ISDs and established their basic functions and organization. All of the LEAs in Michigan are mandated to be included within an ISD, and in most cases the ISD board of education is elected by the constituent LEAs. As a result of the 1962 law and subsequent legislation, most ISD activities fall into five categories (Stephens, 1975):

- o special education programs (the ISDs operate classroom services to serve the LEAs);
- o vocational-technical education programs (the ISDs operate classroom services to serve the LEAs);
- o curriculum consultant services (the ISD staffs provide information and technical assistance to the LEAs);
- o data processing services, central purchasing, and other administrative services (the ISDs provide these services to the LEAs on a fee-for-service basis); and
- o knowledge utilization services (the ISDs provide information and assistance for using educational media, for adopting new practices, and for inservice training of LEA staff).

Some of these services are established as "required duties" of the ISDs; other services have evolved from the "permissive authority" granted to the ISDs (for a full description, see Report of Blue Ribbon Task Force, 1977).

All of the ISDs may draw their funding from four major sources (Davis, 1976): local property tax levies, state aid, federal programs in education, and fees paid by LEAs for specific services. Of these sources, the state aid formula was changed in 1975, and this had a significant impact on the Wayne ISD budget. Until 1975, the formula had been based on existing millage rates, and not on a per/pupil calculation. This resulted in the Wayne ISD having a budget that was disproportionately smaller than those of the other ISDs, in terms of the number of students served. The 1975 law (Public Act

Figure 2

BOUNDARIES OF MICHIGAN INTERMEDIATE
SCHOOL DISTRICTS, JANUARY 1975



261) shifted the state aid formula to a per/pupil basis; because the Wayne ISD was serving about 500,000 students at the time (see Table 2), the Wayne ISD's budget was increased substantially. As a result of this change as well as increases in federal funds, the Wayne ISD has been able to expand the services available to its constituent LEAs over the past few years. The expansion in turn has allowed the ISD to be much more visible and responsive in serving the LEAs, even for such a large school system as the Detroit LEA.

Even though the Wayne ISD offers a diverse array of services, the purpose of the present study was to focus on knowledge utilization services. This is because the Wayne ISD was known to be exemplary in this regard, and the purpose of the study was to explain how and why knowledge utilization occurs in this type of interorganizational arrangement.

Knowledge Utilization Activities in the Wayne ISD

As a regional unit serving a group of LEAs, the Wayne ISD brings new information and external resources to the attention of the LEAs, which contain about 28,000 teachers and administrators. School and district staffs may then implement a new practice, or may become better trained and knowledgeable about the educational process even though no service practice may have been changed. Either situation represents an instance of knowledge utilization.

The specific knowledge utilization activities are highly varied and may involve staff in several different organizational units within the Wayne ISD. Figure 3 shows the organizational chart of the Wayne ISD at the time of the present study. For core curriculum areas, knowledge utilization activities generally occur under any of (but are not necessarily limited to) the units under the Deputy Superintendent for General Education (see Figure 3). The most active of these units are 1) the General Education Consultants unit, and 2) the Information Services unit. However, the diffuseness of the knowledge utilization activities throughout the ISD--e.g., utilization in special education occurs independently, under the Associate Superintendent for Special Education--making it difficult to arrive at a realistic estimate of the resources committed to knowledge utilization. The Wayne ISD itself makes no attempt to divide its budget or organization into knowledge utilization vs. non-knowledge utilization categories.

Table 2

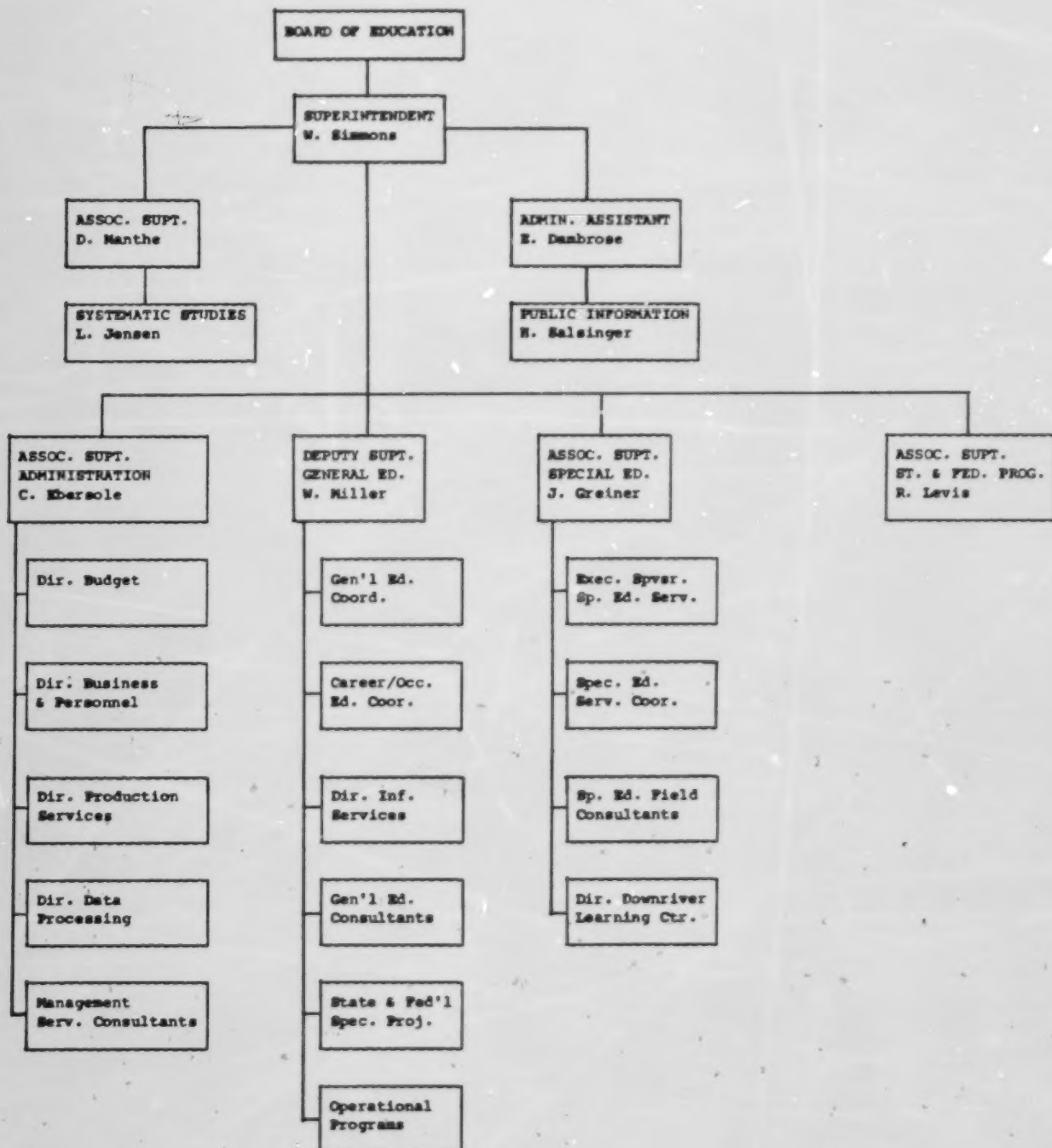
PUBLIC EDUCATION STUDENTS SERVICED BY WCISD

Year	Number of Students
1974-75	529,805
1975-76	516,920
1976-77	501,339
1977-78	482,636
1978-79	464,937
1979-80	445,800

Source: WCISD, Fourth Friday Count

Figure 3

WAYNE COUNTY INTERMEDIATE SCHOOL DISTRICT ORGANIZATION



SOURCE: Wayne County ISD, 1980

Because of the difficulty in tracing all of the knowledge utilization activities, a more realistic approach for analyzing these activities is to focus on specific knowledge utilization services within the ISD. Three types of services, representing the dominant modes of knowledge utilization, have previously been identified (see Yin and Gwaltney, 1980): services involving workshops, conferences, and other types of staff development; services involving information retrieval in response to specific inquiries; and services involving assistance from individuals recruited to serve as linking agents. Within the Wayne ISD, these three groups of services all exist, and the following examples were selected for more intensive study:

- o The Interinstitutional Workshop program, which provides staff development;
- o Project ASK, an information retrieval service that responds to requests for educational information by LEA personnel; and
- o Project VALUE, which supports linking agents who assist LEAs in considering, adopting, and implementing innovative educational practices.

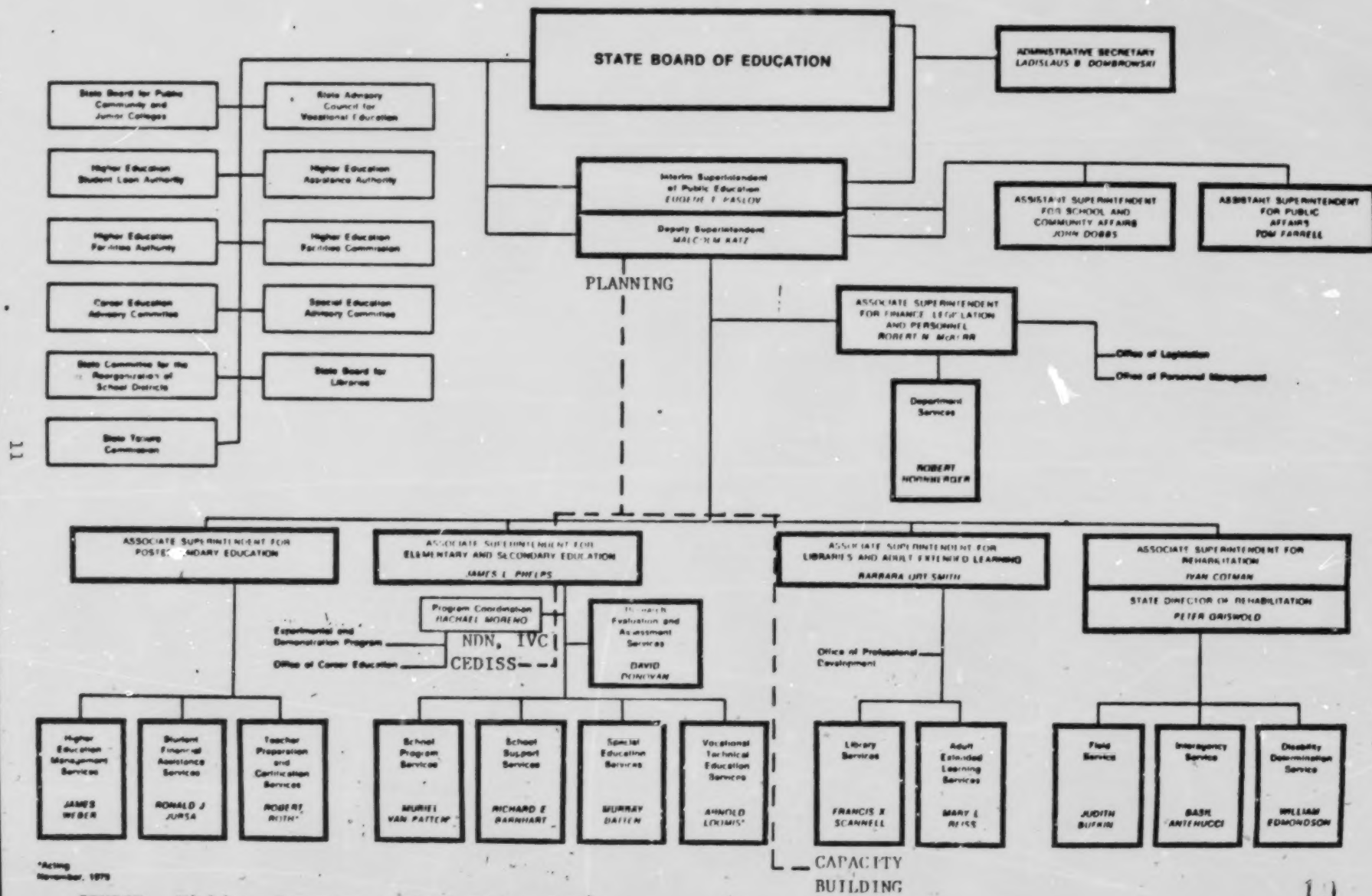
Each of these services is described in greater detail in Section II.

Related Activities in the State

Besides providing state aid, the Michigan Department of Education (MDE) also plays a direct role in facilitating an ISD's knowledge utilization activities. First, the MDE administers the federal ESEA Title IV-B and IV-C funds. The MDE develops a general plan for using these funds and then reviews and approves specific proposals submitted by the ISDs or their constituent LEAs. For instance, Project VALUE is mainly supported through Title IV-C funds; as another example, LEAs wishing to adopt innovative practices may apply for up to \$5,000 in IV-C assistance. Second, special federal programs, such as the National Diffusion Network and the State Capacity Building Program, are also administered by the MDE. Third, the MDE operates a library whose main purpose is to provide educational information to personnel throughout the state. Figure 4 shows the full organizational chart for the MDE; as each of the Wayne ISD's three knowledge utilization services is discussed more fully in Section II, the relevant organizational units will be referenced.

Figure 4

MICHIGAN DEPARTMENT OF EDUCATION ORGANIZATION



*Acting
November, 1979

SOURCE: Michigan Department of Education, 1980

The state of Michigan also has three other regional systems that in part provide knowledge utilization services. All three systems were established by state law and include: the Special Education Districts, the Career Education Planning Districts (CEPDs), and the Regional Educational Media Centers (REMCs, pronounced "rem-sees"). The first two systems specialize on the narrower curriculum topics indicated by their titles; both systems involve units dispersed throughout the state, with the CEPDs corresponding to the geographic boundaries of the ISDs. The third system consists of 22 units that specialize in providing media products and services to LEAs. These units were created by Public Act 55 in 1970. The 22 units are supported almost equally by state aid (section 83 of the State School Aid Act) and by federal IV-B funds, at an overall level of about \$4 million and with about 300 staff persons in all of the REMCs combined (see Michigan Department of Education, Dec. 1976; and Regional Media Centers, no date). Each unit represents clusters of ISDs, although the larger ISDs, like Wayne, constitute a single REMC.

II. INTERORGANIZATIONAL ARRANGEMENTS FOR KNOWLEDGE UTILIZATION

In its most general form, the pertinent interorganizational arrangements related to the Wayne ISD's knowledge utilization activities involves four different types of organizations:

- o the Wayne County ISD;
- o the Michigan Department of Education;
- o the LEAs and constituent schools in the Wayne County area; and
- o other independent organizations, such as state and local universities, whose staffs often provide consulting or teaching assistance.

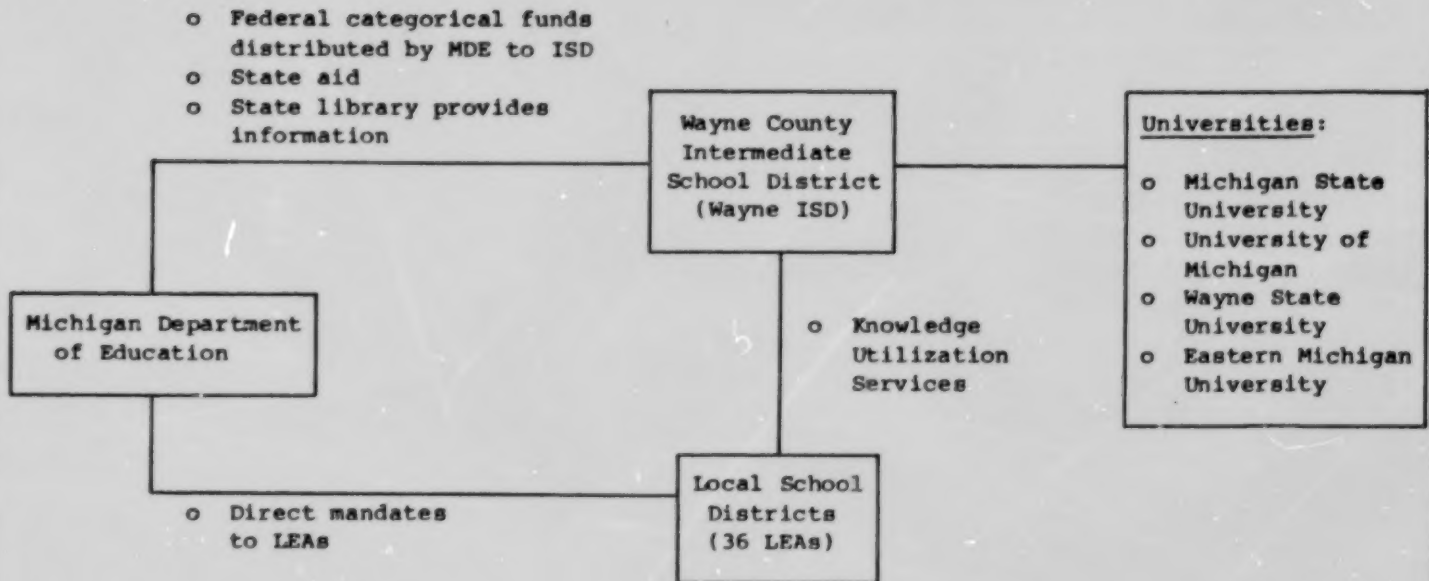
This general arrangement may be depicted in the following fashion (see Figure 5).

The main goal of the present study was to investigate how knowledge utilization occurs within the context of this arrangement, including observations about the formality of the interorganizational arrangement and the degree of interorganizational collaboration. Because of the diversity of knowledge utilization services, however, the general arrangement is not a precise enough basis for analyzing interorganizational linkages. Each specific service may involve specific arrangements that are different from those of other services. This can occur for several reasons. First, all four of the different types of organizations may not always be participants. For example, the state department of education or several universities may be an integral part of one service but not another. Second, the role of each organization may be different, depending upon the specific service. For some services, one of the organizations may provide funding support only; for other services, the same organization may be the central focus for managing or administering the service. Third, the collaborating unit within each organization may be different, creating arrangements that, in their detailed organizational articulation, are actually different from each other.

To fully appreciate the interorganizational linkages, and to analyze why knowledge utilization networks operate as they do, requires a separate delineation of the linkages for each specific knowledge utilization service. For this reason, the following subsections describe separately the three knowledge utilization services that were selected for intensive study. Section III then attempts to account for the outcomes of these three services as well as for the Wayne ISD's knowledge utilization activities as a whole.

Figure 5

ORGANIZATIONS INVOLVED IN KNOWLEDGE UTILIZATION SERVICES



Interinstitutional Workshops

The Wayne ISD offers many inservice and workshop opportunities for LEA personnel. For the core curriculum these activities are usually carried out by the Wayne ISD's general education consultants, who are assigned according to curriculum specialty rather than geographic area. Among these consultants' activities, one specific service is known as the Interinstitutional Workshops.

Workshop Description. These Workshops were first initiated in the fall of 1967, to fulfill a need for inservice training for LEA personnel. The inservice training is provided by professors from four universities, by part-time commitments on the part of ISD staff, and by external consultants as needed. Since 1967, about 1800 persons have enrolled in the Workshops (see Table 3).

The Workshops have several distinctive features (see Fox and Griffin, 1974). First, each Workshop is a 16-week series of classes, meeting for about four hours per week. Enrollees pay their own tuition and may obtain university credit for their participation. (Noncredit enrollees need not pay any tuition.) Second, the Workshops are organized according to teams. A minimum of five teachers, either from the same district or the same school building, must agree on a topic and enroll together; strong preference is also given to teams that have involved the relevant building principal(s). Third, the topic of each Workshop is determined by the team itself, which is encouraged to choose topics directly related to its own school problems. Thus, the teams first apply for entry into the Workshop program, and then the appropriate teaching staff is identified. In this sense, the "curriculum" of the Workshops is defined by the needs of the enrollees, and not by any prior "catalog" of courses. In the early years of the Workshops, these topics tended to be on core curriculum areas; more recently, demands have increased for such topics as affective education, school climate, and substance (alcohol and drug) abuse.

The role of the Wayne ISD in sponsoring the Workshops is both a teaching and a coordinating role. In its teaching role, the ISD staff serve, along with professors from four universities (Eastern Michigan, Wayne State University, the University of Michigan, and Michigan State University), as the teaching staff for the Workshops. In its coordinating role, the ISD manages the whole Workshop program, which includes the following functions:

Table 3

WAYNE COUNTY INTERINSTITUTIONAL WORKSHOP
ENROLLMENT--TWELVE-YEAR PERIOD

Academic Year	Michigan State University		University of Michigan		Wayne State University		Eastern Michigan University		No Credit		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1967-68	11	4.2	72	27.1	77	29.1	105	39.6	0		265	100.0
1968 (Spring)	0		10	9.5	23	21.9	72	68.5	0		105	99.9
1968-69	0		7	5.1	41	29.5	91	65.4	0		139	100.0
1969-70	4	2.5	21	12.6	28	16.7	114	68.2	0		167	100.0
1970-71	5	4.8	14	13.3	20	19.0	66	62.8	0		105	99.9
1971-72	4	4.2	12	12.8	37	39.4	40	42.5	1	1.1	94	100.0
1972-73	0		15	8.8	99	58.2	55	32.3	1	0.6	170	99.9
1973-74	3	2.4	16	13.0	37	30.1	67	54.5	0		123	100.0
1974-75	3	2.1	19	13.6	58	41.4	60	42.9	0		140	100.0
1975-76	2	1.6	31	25.4	41	33.6	48	39.4	0		122	100.0
1976-77	1	1.5	10	15.6	33	51.6	20	31.3	0		64	100.0
1977-78	8	7.3	22	20.2	35	32.1	44	40.4	0		109	100.0
1978-79	6	4.2	27	18.9	42	29.4	68	47.5	0		143	100.0
TOTAL	47	2.69	276	15.81	571	32.71	850	48.68	2	0.11	1746	100.0

SOURCE: Wayne County ISD, 1980

- o making all logistical arrangements, including two general sessions for all Workshop participants, one general session for team leaders, and individual Workshop meetings for each team;
- o announcing the Workshop program, assisting potential enrollees in identifying pertinent problems to be studied, and reviewing and approving applications;
- o arranging for the necessary assistance from the four universities and from any ad hoc external consultants;
- o collecting the fees from the enrollees and reimbursing the universities to cover their costs; and
- o designing follow-up classes, if specific workshops so desire.

The major administrative function not covered by the Wayne ISD has to do with the credit and degree certification that enrollees may derive from the Workshops; these are negotiated directly by the individual enrollee and the appropriate university department.

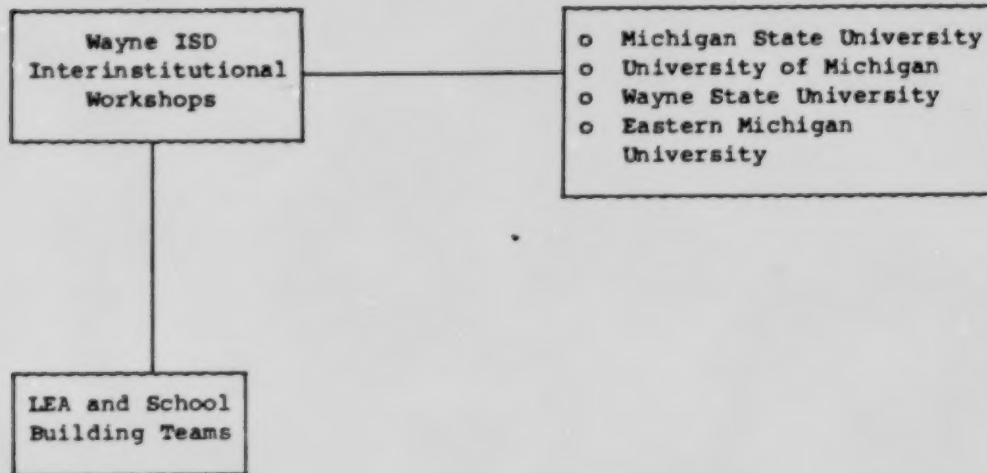
The Workshop's Interorganizational Arrangement. The interorganizational arrangement for operating the Workshops contains three types of organizations: The Wayne ISD, the local universities, and the constituent LEAs. The Michigan Department of Education was peripherally involved at one time, when one of the MDE's staff members helped to teach some of the Workshops; however, at the present time there is no MDE participation in the Workshops. Overall, the full arrangement, with the collaborating units within each type of organization also identified, is shown in Figure 6.

Workshop Outcomes. Several different outcomes are relevant to the Workshop program. First, overall enrollment has remained at a steady level for about 13 years, with the program continually achieving its general goal of enlisting about 100 tuition-paying participants and about 10-12 teams per year (see Table 3). With the exception of the in-kind contributions made by the Wayne ISD in terms of its staff's teaching and coordination activities, the Workshop program is entirely self-supporting: The fees paid by the individual enrollees cover the full amount of university and administrative costs.

Second, the enrollees have consistently reported satisfaction with the program. This conclusion is based on the examination of enrollees'

Figure 6

ORGANIZATIONS INVOLVED IN WAYNE ISD STAFF
DEVELOPMENT SERVICES



responses to an annual questionnaire (see Appendix A for a tabulation of the 1979-1980 questionnaire). Workshop enrollees reported that:

- o they had achieved their personal goals in attending the Workshops (see Question 4 of the tabulation);
- o the arrangements for receiving university credit were satisfactory (see Question 14); and
- o pupils and school operations had both benefited from the Workshops (see Questions 1 and 3).

Third, the Workshops appear to have resulted in the implementation of some classroom improvements (see Question 11 of Appendix A). The actual degree of improved practice, however, has not been traced in detail. An early assessment found that 58% of the enrollees had made a change in practice (Nowka, 1969). However, no attempt has been made in recent years to re-assess this outcome. In part, this is because the Workshops probably increase training and knowledgeability among the teachers in a diffuse manner that is not easy to translate into specific service changes. For instance, one Detroit principal, interviewed for the present study, indicated that her team's main goals were related to school revitalization. Other than noting that the Workshops remained an attractive option for teachers, there was little way of knowing what specific improvements had occurred.

In spite of the successful operation of the Workshops for these many years, some difficulties may arise in the future. As the LEA staffs gradually become older (a phenomenon accompanying declining enrollments), fewer are likely to be interested in obtaining academic credit for graduate degrees. The likely result will be a declining interest in the workshop program.

Project ASK (Assistance with School Knowledge)

Service Description. Project ASK is an information retrieval service, in which individual inquiries about educational information are answered by Wayne ISD staff. The inquiries may be made through the mail, by visiting the Wayne ISD, or by telephone. Most of the inquiries are for topics that a teacher might want to cover in a classroom, though inquiries may also come from administrators and other staff personnel. The response might be a suggested list of readings, an extensive bibliography, xeroxed copies of key articles, sample educational materials, or other written

information. As a basis for responding, the Project ASK staff may search ERIC, the DIALOG Information Retrieval Service (a commercial venture, organized nationally, to give access to over 100 data bases), or manual files. The response generally involves a mailed communication from the Wayne ISD to the inquiring party.

Project ASK, under one title or another, has operated within the Wayne ISD since 1967. Earlier versions of the project were funded from 1967 to 1973, and it was not until 1973 that the title "Project ASK" was first used. The equivalent of about 5 person/years, including support staff, is used by the project, with one of the staff members physically located at Wayne State University to gain direct access to the university's resources. In making a response, the goal of the director is to provide an answer, and not a referral; moreover, the staff tries to respond as quickly as possible, usually within a matter of days.

The initial forerunner to Project ASK was funded under ESEA Title III. Since 1970, the service has been considered part of Wayne County's REMC, one of 22 similar units located throughout the state. A combination of Title IV-B funds and ISD funds is used to support the REMCs. Each REMC has some capability for:

- o distributing films, videotapes, and graphic materials;
- o printing materials needed by LEAs;
- o purchasing media materials and equipment on a centralized basis; and
- o providing information retrieval services.

In the Wayne ISD, Project ASK is thus only one of several activities within the REMC. Moreover, the REMC's operations are enhanced through the existence of four satellite offices located throughout the Wayne County area.

Interorganizational Arrangement. Within the Wayne ISD, Project ASK is administered under the Director for Information Services, who is also considered the head of the REMC. However, the staff of Project ASK deal directly with individual inquirers, so that there is no interorganizational relationship between the ISD and the LEAs with regard to this service. Some contacts with the Michigan Department of Education occur when discussions are held over the allocation of the Title IV-B budget or when the Project

ASK staff consult the library staff in the MDE on specific requests.¹ Thus, the only continuous interorganizational link has to do with ASK's arrangement for space with Wayne State University. The full interorganizational arrangement is shown in Figure 7.

Outcomes. For 1978-79, about 1500 inquiries were made, involving about 2700 questions (some inquiries can consist of more than one question). The nature of these inquiries, divided into general education and special education categories, is shown in Table 4. The Table also indicates the types of persons who made the inquiries and the manner of their request. For the same period of time, Table 5 shows the distribution of these requests by LEA identification. It should be noted here that a good proportion of the requests are made by the Wayne ISD itself.

Comments made by one teacher in the Detroit public schools provide some insight into the usefulness of Project ASK. This teacher operates a reading lab that has become a resource center for the entire school, with other teachers asking for materials or information on various topics. When such requests are made within the school, the reading lab teacher may contact Project ASK; she has found the responses timely and of high quality in that the materials are up-to-date and relevant to teaching needs. When asked, the reading teacher noted that similar services are in fact unavailable through the Detroit central office, though in principle the office is supposed to serve school administrators and teachers.

Project VALUE (Validated Activities for Learners' Use in Education)

Service Description. The third service examined in the Wayne ISD was Project VALUE, which assists schools through a system of linking agents. There are two types of linkers (see Moir, 1979): external linkers (who are staff members of Project VALUE and employed by the Wayne ISD) and internal linkers (who tend to be curriculum directors employed by the constituent LEAs). Project VALUE encourages a school staff to implement new products and practices to address its problems. The project helps a staff to determine its needs, to select products matching those needs, and to install the new product or practice.

¹ The library staff has been augmented in recent years by the use of the State Capacity Building Grant that began in 1976.

Figure 7

ORGANIZATIONS INVOLVED IN WAYNE ISD
INFORMATION RETRIEVAL SERVICE

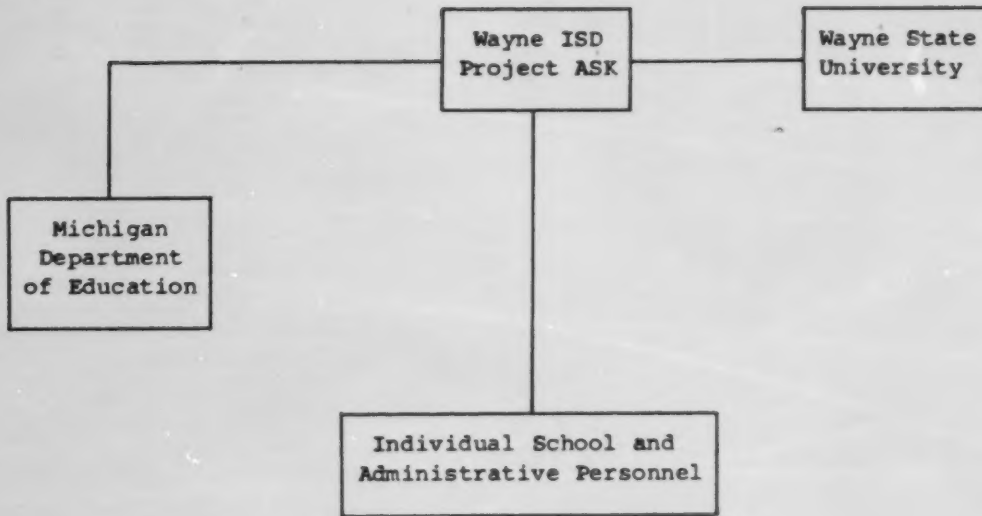


Table 4

SUMMARY OF INQUIRIES MADE OF PROJECT ASK,
1978-1979

INFORMATION REQUESTS

SOURCE: Wayne County ISD

General Education..... 1175
 Special Education..... 295
 TOTAL..... 1470

Project VALUE.....67

DISTRICTS SERVED

	<u>General Education</u>		<u>Special Education</u>
WCISD.....	391		66
LOCAL DISTRICT...	652		219
NON-PUBLIC.....	25		
AGENCY.....	7		3
OTHER.....	60		7

MANNER OF REQUEST

MAIL.....	73		12
PHONE.....	653		226
IN-PERSON.....	449		57

BREAKDOWN BY TYPE

311	TEACHERS asked	532	No. Questions
63	CONSULTANTS & SUPERVISORS	103	No. Questions
362	WCISD STAFF	633	No. Questions
170	ADMINISTRATORS	281	No. Questions
3	SATELLITE STAFF	18	No. Questions
7	SUPPORT STAFF	7	No. Questions
13	CURRICULUM SPECIALISTS	33	No. Questions
	STUDENT TEACHERS		No. Questions
20	PARENTS	28	No. Questions
52	LIBRARIANS/ MEDIA SPEC.	131	No. Questions
174	OTHERS	293	No. Questions
1175	TOTALS	2059	No. Questions

97	TEACHERS asked	182	No. Question
22	CONSULTANTS & SUPERVISORS	32	No. Question
41	WCISD STAFF	74	No. Question
16	ADMINISTRATORS	23	No. Question
39	SATELLITE STAFF	55	No. Question
2	SUPPORT STAFF	4	No. Question
6	CURRICULUM SPECIALISTS	16	No. Question
	STUDENT TEACHERS		No. Question
3	PARENTS	9	No. Question
1	LIBRARIANS/ MEDIA SPEC.	1	No. Question
68	OTHERS	170	No. Question
295	TOTALS	566	No. Question

Table 5

WAYNE COUNTY SCHOOL DISTRICTCHECK LIST

SOURCE: Wayne County ISD

FREQUENCY OF USE

	<u>SPECIAL ED</u>		<u>GENERAL ED</u>
ALLEN PARK	3	2	1
CHERRY HILL	9	5	4
CRESTWOOD	56	11	45
DEARBORN	21	4	17
DEARBORN HEIGHTS #7	15	3	12
DETROIT CITY -Central	81	22	59
REGION 1	22	4	18
REGION 2	16	2	14
REGION 3	28	3	25
REGION 4	24	2	22
REGION 5	12	5	17
REGION 6	31	4	27
REGION 7	13	1	12
REGION 8	10	0	10
ECORSE	7	0	7
FLAT ROCK COMMUNITY	4	2	2
GARDEN CITY	26	12	16
GIBRALTAR	11	6	5
GROSSE ILE	11	0	11
GROSSE POINTE	8	2	6
HAMTRAMCK	2	0	2
HARPER WOODS	7	0	7
HIGHLAND PARK	12	7	5
MURON	3	0	3
INKSTER	22	1	21
LINCOLN PARK	21	4	17
LIVONIA	67	26	39
MELVINDALE-NORTHERN ALLEN PARK	8	3	5
NORTH DEARBORN HEIGHTS	8	1	7
NORTHVILLE	40	31	9
PLYMOUTH-CANTON COMMUNITY	32	4	26
REDFORD	25	12	13
RIVER ROUGE	1	0	1
RIVERVIEW COMMUNITY	9	0	9
ROMULUS	19	8	11
SOUTHGATE COMMUNITY	6	0	6
SOUTH REDFORD	14	5	9
TAYLOR	71	8	63
TRENTON	12	2	10
VAN BUREN	13	1	12
WAYNE-WESTLAND	62	5	57
WESTWOOD COMMUNITY	10	1	9
WOODHAVEN	19	6	13
WYANDOTTE	8	2	6
Total School Districts	911	219	692
Total WCISD	457	66	391
	1368	285	1083

Project VALUE began in 1976 and is in its fourth year of a five-year Title IV-C award, administered by the Michigan Department of Education. Four professional staff members of the ISD work on the project. The services of Project VALUE are closely coordinated with those of two other programs: the Michigan Adoption Program (MAP), also funded under Title IV-C, and the National Diffusion Network (NDN). Thus, Project VALUE has actually encouraged schools to consider new products and practices from four sources:

- o the National Diffusion Network's national product bank (Educational Programs That Work);
- o the Michigan Adoption Program's statewide product bank (Michigan Educational Programs That Work);
- o a locally developed bank of "promising" practices assembled by Project VALUE staff (Wayne County Promising Programs); and
- o other product banks developed in conjunction with nearby ISDs.

Of these two sources, only the first two are considered to contain "validated" products (see Yin, Gwaltney, and Louis, 1980). If a school wants to adopt one of these products, it is eligible for adoption assistance grants, which provide up to \$5,000 and are awarded by the MDE under Title IV-C. However, if a "promising" practice is the target, the school enters a trial implementation phase rather than an adoption phase, and funds are available under other categories of Title IV-C.¹

Project VALUE makes its services known through a variety of outreach efforts, including awareness sessions, brochure mailings, and presentations at meetings. However, the most important contact with the school sites, both initially and throughout the period of adoption and implementation, is through the external and internal linking agents. These persons work directly with a school and may help the school to define its problems in a meaningful way, to identify an array of potentially relevant products, and to assist in the adoption and implementation process. In providing this assistance, the linking agents often help the school staff to prepare the necessary

¹ Schools can also receive four other types of Title IV-C awards, related to the development of new products or programs.

documents in applying for adoption grants, including preparation of a "letter of interest" and of the full proposal. Of these linking agents, only the three external linkers on the Project VALUE staff conduct these activities on a full-time basis; the 56 internal linkers, having full-time designations as curriculum directors or other LEA positions, fulfill Project VALUE functions only on a part-time basis.

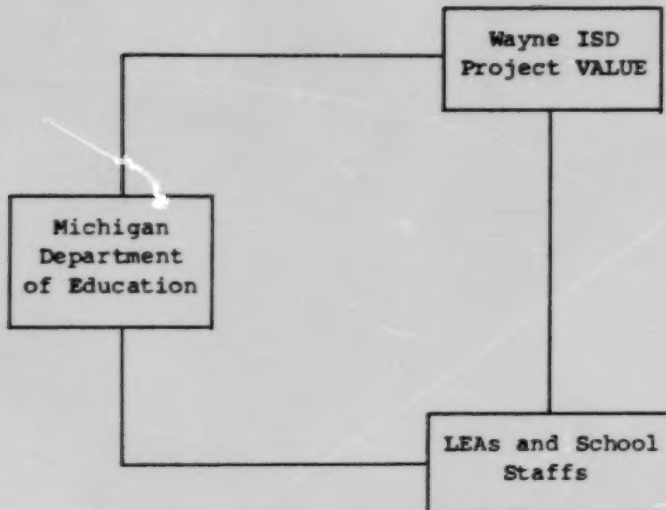
Project VALUE itself, as a unit located within the Wayne ISD, is similar to nine other units across the state, all of which are known as Regional Supplemental Centers, whose collective role is to serve as the statewide NDN facilitator. All of the Centers are funded through Title IV-C funds administered by the Michigan Department of Education, and all assist local schools in participating in the National Diffusion Network program. (The NDN program, however, does not provide funds for adoption sites; if an NDN product or practice is selected, only the developer of that product or practice can obtain NDN funds to travel to the local site for training and demonstration purposes.)

Project VALUE'S Interorganizational Arrangement. Like Project ASK, Project VALUE is administered by the Director of Information Services in the Wayne ISD. In other respects, however, the arrangement differs in that the main linkage at the Michigan Department of Education is with the Experimental and Demonstration Centers Program, which administers the Title IV-C, NDN, and MAP programs for the state. In this regard, it should be remembered that Project VALUE is itself a IV-C project that was approved, along with projects at each of the nine other Regional Supplemental Centers, by the MDE. The main linkage between Project VALUE and the LEAs occurs over the two levels of external and internal linking agents, and focuses on teams of LEA staff rather than on individuals. Finally, the Wayne ISD will occasionally call upon an NIE-supported organization, CEMREL for resource assistance, but there is no formal interorganizational link. The full interorganizational arrangement is illustrated in Figure 8.

Outcomes. Project VALUE can be viewed from the perspective of several outcomes. First, the project has assembled a catalog of 33 local products and practices that are in the "promising" programs bank (see Wayne County Promising Programs, 1979). The development of this bank required the staff to contact local innovators (schools or LEAs) and to determine whether

Figure 8

ORGANIZATIONS INVOLVED IN WAYNE ISD
IMPLEMENTATION ASSISTANCE (PROJECT VALUE)



new practices had potential applicability and payoffs for other schools or districts. Where such programs were found, the staff helped the local innovator to document more fully the nature of the new practice and to answer inquiries and receive visitors from other LEAs. Eventually, some of these promising programs should also become part of the NDN and MAP catalogs.

Second, Project VALUE has also responded to many inquiries and made many contacts with LEAs. The distribution of these inquiries by curriculum area is shown in Table 6. In responding to these requests, Project VALUE is already providing a useful service. The bulk of the inquiries appears to have covered "educational alternatives," which has been a topic of great interest in Wayne County. Such alternatives include alternative school programs, in which school curricula are designed to be more responsive to the needs of students. One such middle school in the Detroit public school system was visited as part of the present case study, and this school had a waiting list of applicants that was typically 3-4 times the 200 spaces that were available.

A third type of outcome is perhaps more critical to Project VALUE's work: the number of adoptions made by schools each year. In 1978, 44 NDN and MAP adoptions occurred in individual schools or by whole school districts. Table 7 lists the programs that were adopted and the number of districts that adopted them. An estimated 14,000 students and 900 teachers and administrators were involved in the adoptions. Project VALUE has thus played a substantial role in facilitating the diffusion of innovations.

Overlapping Activities

In addition to these three specific knowledge utilization services, the Wayne ISD also provides a variety of other general and specialized consulting services for LEAs. These other activities were not specifically examined as part of the present study. However, two points are worth mentioning regarding the full range of the ISD's activities.

First, the Wayne ISD conducts large-scale needs assessments on a periodic basis. In February 1978, a questionnaire was distributed to all LEA administrators and teachers in the county. About 9,700 responses were received and tabulated, covering 65 questions. Among the highest priorities for additional inservice training and technical assistance were the following topics:

Table 6

REQUESTS MADE OF PROJECT VALUE, 1978-79

Educational Topic	Number of Requests
Basic Skills	115
Career Education	121
Educational Alternatives	478
Gifted	171
Language Development	186
Learning Disabilities	128
Mainstreaming	123
Parent Participation	123
Preschool/Early Childhood Education	195
Reading/Elementary Grades	231
Reading/Secondary Grades	215
Special Education	155
Other	716
TOTAL	2,957

SOURCE: Wayne County ISD

Table 7

MDN AND MAP PROGRAMS ADOPTED, 1978

Programs Adopted	Number of Districts*
Better Acquisition of Cognitive Skills Through Outdoor Programming	1
Birmingham Creative Music Project	3
Career Development Centered Curriculum	3
A Chance for Every Child	1
Comprehensive School Mathematics Program	4
Curriculum for Meeting Modern Problems - The New Model Me	1
Economics and the Consumer	6
Functional Analysis Systems Training	3
High Intensity Tutoring Project	1
Learning Experience Module	1
Project Metric	2
Model to Affect Curriculum Improvement in Science	7
Occupational and Career Development	2
Parent Advisory Committee-VALID-PAC	1
Parents are Teachers at Home	3
Problem Solving Instruction	1
Project Management Basic Principles and Skills	1
Reading Improvement Program	1
School Volunteer Development Project	1
Talents Unlimited	1

* Includes public and parochial school districts

SOURCE: Wayne County ISD, 1980

- o building pupil relationships;
- o classroom discipline;
- o reading and language arts;
- o problem solving; and
- o personalized/individual instruction.

The results have been used by the ISD to shape its own programs and set its own priorities, and a new assessment is being planned for 1980. Similarly, the Wayne ISD surveyed the LEA superintendents in 1979, regarding their needs and priorities. The results of the survey showed that superintendents felt the greatest needs for staff development and knowledge utilization activities, only valuing the administrative services provided by the ISD as a lower priority. Again, the results have been incorporated into the ISD's plans for future activities.

Second, the Wayne ISD also maintains records of its overall field contacts with its constituent LEAs. For the six-month period ending on January 1, 1980, about 8,000 such contacts were tabulated, covering general education, special education, and data processing (general education accounted for about 7,500 of the contacts). About half of these contacts were initiated by the LEAs; for all contacts, about 14% were with personnel in the Detroit LEA. These estimates provide some sense of the overall magnitude of the ISD's activities, although it is obviously difficult to draw any conclusions regarding outcomes and impacts from such data.

III. REASONS WHY THE WAYNE ISD'S KNOWLEDGE UTILIZATION SERVICES ARE USED

The preceding section has indicated the ways in which the Wayne ISD provides knowledge utilization services to LEAs. Three different services were examined in each case:

- 1) the service continues to be used with satisfaction by LEA personnel (administrators and teachers); and
- 2 the service has been operating for several years or more (the Workshops are in their 13th year, Project ASK is about 12 years old, and Project VALUE is in its fourth year).

The original purpose for selecting these three different services was to cover three different types of knowledge utilization services, including staff development, information retrieval, and the use of linking agents. In spite of the differences among the three services, however, several common themes appear to explain why these services have been used. These are that: 1) the services are responsive to local needs, 2) the services appear to be credible, 3) the services are based on strong interpersonal ties, and 4) the services result in benefits to both the LEAs and the ISD as a whole. Less important as themes are three other candidates that were also considered at the outset of the study: 5) the services are a result of formal, interorganizational agreements, 6) the services are used because of the need to comply with external requirements, and 7) the services involve the reduction of conflict among the participating organizations. The following subsections discuss each of these themes and cite examples, where relevant, to substantiate each one.

1. The Services are Responsive to User Needs

The first theme may be considered a "responsiveness" theme. Along these lines, the major mission of the Wayne ISD is to serve LEA needs; the ISD has no other competing mission, such as granting academic degrees, providing formal training and accreditation, or developing new R&D. The goal of serving LEAs is embedded in the original ISD legislation and is held as first priority among the ISD staff.

In an attempt to attain this objective, the knowledge utilization services of the Wayne ISD are designed to be user-responsive. Thus, the following examples are pertinent:

- o The ISD as a whole is continually surveying LEA personnel, whether in large-scale needs assessments or in special surveys of LEA superintendents;
- o The Interinstitutional Workshops do not have a fixed curriculum, but develop new curricula each year, depending upon the educational problems that enrollees have identified;
- o Project ASK, by definition, only operates when it deals with issues and problems raised by individual inquirers--i.e., users; and
- o Project VALUE has continually stimulated schools to consider new practices, and has expanded the product bank so that the widest choice of alternatives will be available.

Notably, the nature of the services is not dictated by other extraneous concerns, such as the need to disseminate specific products or the need to show improvements in certain curriculum areas. Instead, the Wayne ISD attempts to concentrate its efforts on those topics deemed to be important by the LEAs; as these topics shift, so presumably do the ISD's priorities.¹

Although this type of user responsiveness appears to be the most prominent theme in understanding why the Wayne ISD's services are used, the actual degree of responsiveness is nevertheless difficult to measure. For example, because the ISD's service area and population are so large, relative to the ISD's resources, services are directed at those LEAs most frequently requesting assistance (and not necessarily those LEAs with the greatest educational problems). To this extent, responsiveness to actual user needs--as opposed to user requests--might not be considered high. As a second example, most of the LEAs, because of declining enrollments and budgets, have few alternatives for obtaining the services provided by the Wayne ISD. The degree of responsiveness of the ISD's services might again be viewed differently if the constituent LEAs had such alternatives and could "shop

1

An excellent example of this shifting is reflected in the Wayne ISD's newest programs which are aimed at assisting LEA administrators and school board members. These personnel were found to have had unmet informational needs especially because of the increased turnover among specific incumbents.

around" to serve their needs.¹ Such conditions might assure that the ISD's services remain as responsive as possible.

Despite these measurement difficulties, the surface reaction remains the same: The Wayne ISD's knowledge utilization services are used because they are designed to meet users' priorities. One summary example of this responsiveness is in the evolution of the Workshops. Originally, the enrollees travelled to the university campuses or other common facilities for the Workshop meetings. After a few years, it became apparent that these sessions could more profitably be held in the enrollees' own school building (Fox and Griffin, 1974). First, aggregate travel time was reduced because only the Workshop teacher, and not all of the enrollees, had to travel. Second, the school building provided a more realistic environment for understanding the enrollees' previously identified problems. This change in location of the Workshop meetings, though seemingly a minor administrative adjustment, thus enhanced their receptivity among potential users.² Other adjustments have also been made through the years, as the Workshop program has continually attempted to improve itself (Goldberg, 1979).

2. The Services are Credible

A service can be responsive to user needs but still fail to provide a high-quality product. This can happen, for instance, if an LEA is dominated by educational problems for which few innovative practices or helpful suggestions can be amassed.

The Wayne ISD's services have several characteristics that tend to compensate for, but not offset entirely, this problem. The services are:

- o provided at the time they are needed, with as little delay as possible;
- o usually based on the best available and up-to-date information, so that the assistance reflects the most advanced state of the art; and

¹ Interestingly, the universities, state department, and LEAs themselves offer few competing services.

² There is one exception to this observation. Some inner-city school teams may have expressed reservations about having the Workshops in their school buildings because of potential crime problems during off-school hours.

- o communicated in a competent and attractive (but not slick) manner.

Thus, few LEA personnel would expect dramatic educational improvements as a result of knowledge utilization activities. What they do expect is for these services to have a surface credibility--i.e., for the services to be provided with care and timeliness and for the materials to be recent and attractive to current student populations. The ISD's services appear to satisfy these conditions well. In the case of one user of Project ASK, for instance, the teacher was well aware that educational problems had been shifting rapidly and that many topics were not likely to be covered intensively by the traditional educational resources. Yet, staff from Project ASK have been consistently able to provide useful information for classroom purposes, without the typical embarrassment created among students when materials appear to be old-fashioned.

Along these same lines, the credibility of the Wayne ISD's services is probably enhanced by an activity that is not considered knowledge utilization in the narrow sense. This is the printing, reproduction, and graphics service provided by the ISD. Most schools have great difficulty in producing such materials, and the Wayne ISD provides such services in a responsive manner. Because the materials meet local needs and have a professional appearance, LEA personnel may be more likely to respond favorably to the ISD's knowledge utilization services as well.

3. The Services Are Based on Strong Interpersonal Ties

Many of the ISD's services are more readily accepted because the ISD staff--many of whom have worked within one of the constituent LEAs--are given credit for understanding local needs. Moreover, the average length of tenure in the knowledge utilization positions within the ISD is quite high. In most cases, key supervisors or consultants have been in their jobs for over five years and have therefore been able to provide a continuity of service.

The complete tracing of important interpersonal ties would require an effort beyond the scope of the present case study. However, the following situations may be cited, just within the ISD:¹

¹ Citations such as these could also be made at the state level, where MDE staff have previously served in ISDs and LEAs.

- o The ISD superintendent, in his position since 1974, previously worked as the deputy superintendent of the Detroit LEA;
- o The Director of Information Services in the ISD, in his position since 1973, previously served for about seven years as curriculum director in the Detroit LEA;
- o A general education consultant in the ISD has alternated assignments over the last several years, serving on loan for special staff assignments in the Detroit LEA;
- o Another senior ISD staff person served for many years on the teaching staff and school board of a suburban LEA;
- o Other key ISD staff have served as administrators or teachers in the constituent LEAs, usually for long periods that working acquaintances were developed and carried over to the ISD position.

In general, there has been a steady flow of personnel from the LEAs to the ISD over the years. This pattern may be attributable to favorable salary conditions and the fact that, from a career development standpoint, mobility from an LEA to the ISD may be considered a step "up" for some staff. (Interestingly, the salary conditions have changed over the past years because of aggressive increases in LEA salaries; the ISD is now experiencing difficulty in attracting LEA personnel and may have to rely on recruiting new staff from outside the Wayne County LEA group.) The strength of the interpersonal ties is reflected in the degree to which individuals in the LEAs were able to cite specific persons known among the ISD staff. Often, one critical acquaintance was sufficient to develop a sense of confidence in the ISD's work and a linkage to the appropriate ISD's services.

The interpersonal ties have also been strengthened by formal and informal meetings among the different personnel. For instance, many of the curriculum specialists, in the ISD and the LEAs, belong to the Association of Supervision and Curriculum Development or its state counterpart, the Michigan Association for Supervision and Curriculum Development. Other frequently mentioned organizations were the Michigan Reading Association and the Michigan Intermediate Media Association, chartered to provide direct educational services on behalf of the state and the LEAs.

Less formally, key officials appear to communicate with each other through such occasions as monthly meetings of local curriculum directors or related ISD-LEA activities, which may involve the CETA program or the Teacher Centers program (which has led to the creation of Staff Development Centers in the Wayne County area). Finally, many of the ISD staff attend the county-wide meetings related to their previous LEA role--e.g., curriculum directors, high school principals, elementary school principals, and special education administrators--regardless of their specific ISD assignments.

These interpersonal ties have facilitated other ISD-LEA relationships. For instance, at least a couple of LEA persons, later to become internal linkers within Project VALUE, participated in the design and original proposal for Project VALUE. As a second example, the Wayne ISD's services have changed significantly over the past five years, with rising budgets and a broader array of services available to the LEAs. The duration of the interpersonal ties has been important in allowing the relevant parties to adjust to this change and to take full advantage of the expanded services.

The interpersonal ties do raise one potential problem: ISD services may be more likely to be targeted toward those schools and LEAs where previous associations have existed, at the expense of serving all schools and LEAs on an equal basis. This seems to be only a natural outcome of the current situation, where ISD resources are again inadequate to cover the whole population to be served. Under such conditions, selectivity may be inevitable, and past interpersonal ties are a natural influence in determining which schools are likely to make requests for assistance in the first place.

4. The Services Involve Mutual Exchanges

The preceding themes have pointed to some of the benefits derived by LEAs in using knowledge utilization services. There are certain ways, however, in which the other participants--whether the Wayne ISD, the MDE, or outside organizations--also gain from the collaborative activity. Such mutual exchanges are thus a fourth theme in explaining why the services have been used.

The most important exchange relationship has to do with the Wayne ISD and the member LEAs. The Wayne ISD, like most of the other ISDs in the state, provides assistance in general curriculum areas and in

special education, as well as administrative services, such as computation, printing, and reproduction. The ISD is a logical provider of these direct services because of the economies of scale that can be achieved: Most of the individual LEAs do not have sufficient need for these services to warrant independent action; the LEAs therefore benefit by having the services provided on a regional basis (Kloster, 1978).

Moreover, the LEAs also derive a direct financial benefit from their collaboration with the Wayne ISD. This is because special levies are used to support the direct educational services, and these levies are only available to the ISD. The ISD, in turn, administers many of its services through an LEA (which thus serves the entire region). For instance, many special education services are operated by LEAs on behalf of the ISD, accounting for the drop in this enrollment for the ISD, shown in Table 2. In this manner, 75 to 85 percent of the value of the levy in special education has also been turned over to the constituent LEAs. The LEAs receive an additional bonus because of this arrangement: Because the direct educational services are now under LEA supervision, the portions of the state aid formula (set according to pupils per district) also increases.¹

The ISD also benefits from this arrangement. These direct educational services help the ISD to establish a core program of activities, with state legislation ensuring that the ISD receives budgetary support. The ISD is able to enhance these activities with the types of knowledge utilization programs that have been described in the current study. Most of these programs, as has been indicated, draw their financial support from other state or federal sources, and are therefore provided without charge to the member LEAs. In short, the following exchanges appear to be operating:

- o the state department of education uses the Wayne ISD to provide direct educational services of priority to the state; in return, state aid is used to support the ISD;
- o the Wayne ISD provides direct services; in return, the ISD is given the core support that allows them to include other knowledge utilization activities and to establish a more solid organizational base; and
- o the LEAs receive the direct services as well as the knowledge utilization services. The LEAs also receive direct financial benefits because some of them administer the direct services on behalf of the ISD.

Variations in these types of exchange relationships can also be found with regard to the specific knowledge utilization services provided by the Wayne ISD. One exchange system operates specifically with regard to the Workshops. Enrollees (LEA personnel) gain university credit--and thereby increase their eligibility for promotions--and also gain an opportunity to work as teams on a school-related problem that may ease the burden of their jobs. The universities gain increases in formal enrollment by off-campus students, have an opportunity to work on current educational problems, and have their costs covered by the enrollees' fees. The ISD gains high visibility in coordinating a program that brings external expertise to bear on school problems. Ultimately, this visibility can enhance the ISD's other activities, because of increased receptivity by LEA personnel.

An alternative way of examining this exchange system is to imagine a direct relationship between the enrollees and the universities, without ISD participation. In such a hypothetical case, the administrative burden of matching teams of enrollees with appropriate university resources would be difficult to conduct. Moreover, the universities would have to collaborate directly in developing a standard fee schedule (which was only implemented as a result of the ISD's efforts) and in collecting the fees. Finally, the ISD staff would not be available to provide teaching assistance, which gives the whole program an added degree of flexibility.

A second exchange system operates specifically with regard to Project VALUE. Participating schools are able to try new practices and, often with the ISD's assistance, obtain external support (Title IV-C adoption grants) for these efforts. Because the adoption grants are made on a first-come, first-served basis, there is no quota on the number of schools that can apply from a single area such as Wayne County. Thus, the ISD gains increased recognition for Project VALUE as the number of adoptions increases. Similarly, the MDE (the formal administrator of Title IV-C and NDN) gains credit among its federal government sponsors for facilitating educational innovation.

5. The Services are a Result of Formal Interorganizational Agreements

This fifth theme (as well as the two remaining themes) was not considered important in explaining why the Wayne ISD's services are used. This is because field inquiries yielded few examples of formal agreements.

The only general agreement is embodied in the original and subsequent state legislation giving the ISDs their functions, including the authorization and allocations for the 22 Regional Educational Media Centers. Formal agreements specifically affecting the three knowledge utilization services are notable by their absence: The Workshop program has none, Project ASK only has one in relation to a minor matter (extra space in a local university), and Project VALUE only has its overall agreement as a Title IV-C awardee.

In fact, the Workshop program--involving the ISD, several universities, and LEAs--appears to be based on entirely nonformalized arrangements. There is no written agreement that codifies the university services to be provided or that even identifies the collaborative responsibilities of the various academic departments. The Workshop program has continued over the years even though some university personnel have changed and MDE participation has ceased. Similarly, there is no written agreement, other than those previously mentioned in relation to federal funds, with specific applicability to Project VALUE or Project ASK. The ISD does not appear to be committed to a certain level or type of service, nor are LEAs committed to using any particular service. Whether interorganizational collaboration would be strengthened further if such formal agreements existed is not known. The simple observation at this juncture is that the services are used on a continuing basis in the absence of such agreements.

6. The Services Are a Result of Compliance Conditions

Another theme that was not found involved the effects of compliance to external conditions--e.g., minimum competency testing, desegregation, or other federal requirements. In some cases, but not the present one, such conditions may lead to knowledge utilization services being used as part of a technical assistance effort, even though there may not have been any specific mandate for such services. In Michigan, no compliance conditions appeared relevant as an explanatory factor.

7. The Services Reduce Conflict Among the Participating Organizations

A final theme suggested by previous research is that collaboration occurs because bureaucratic and political conflicts among the participating organizations can be reduced. In the case of the ISD networks being studied, few such conflicts seemed relevant.

REFERENCES

- Davis, Harold S., Educational Service Centers in the U.S.A., Connecticut State Department of Education, Hartford, Connecticut, October 1976.
- Fox, Robert S., and Don A. Griffin, "A New Model for In-Service," Educational Leadership, March 1974, pp. 545-547.
- Goldberg, Albert L., "The Interinstitutional Model for Professional Growth: A Twelve Year Perspective," paper prepared for Wayne County ISD, Wayne, Michigan, March 1979.
- Kloster, Alexander J., Study of Intermediate School District Functions and Organizational Structure, report prepared for the Michigan Association of Intermediate School Administrators, Lansing, Michigan, June 1978.
- Levis, Rae M., Potential Working Relationships Between ESA's and The R&D Exchange, Wayne, Michigan, 1979.
- Michigan Department of Education, Policies and Criteria for Regional Educational Media Centers, Lansing, Michigan, December 1976.
- _____, The Regional Educational Media Centers of Michigan, Lansing, Michigan, no date.
- Moir, Olga, "Internal and External Linkers," paper presented at the annual meeting of the American Educational Research Association, San Francisco, California, April 1979.
- Nowka, David, "Follow-Up Study on the Effects of Innovation Workshops," report prepared for Wayne County ISD, Wayne, Michigan, April 1969.
- Project VALUE, Descriptive Report, 1978-1979, report submitted to the Michigan Department of Education, no date.
- Report of Blue Ribbon Task Force on Intermediate School Districts, Lansing, Michigan, January 1977.
- Stephens, Robert, Regional Educational Services Agencies, Educational Research Service, Arlington, Virginia, 1975.
- Thomas, J. Alan, School Finance and Educational Opportunity in Michigan, Michigan Department of Education, Lansing, Michigan, 1968.
- Wayne County ISD, Wayne County Promising Programs, Wayne, Michigan, 1979.
- Yin, Robert K., Margaret Gwaltney, and Karen Louis, "The Use of R&D Products in the RDU Program," Abt Associates, Cambridge, Massachusetts, February 1980.
- Yin, Robert K., and Margaret Gwaltney, "Knowledge Utilization Networks in Education: Study Design," Abt Associates, Cambridge, Massachusetts, January 1980.

PERSONS INTERVIEWED FOR CASE STUDY

Wayne County Intermediate School District

Dr. William Simmons
Superintendent

Dr. William Miller
Deputy Superintendent

Dr. George Grimes
Director, Professional Resources Center

Mr. Fred Acerri
Director, Project ASK
Professional Resources Center

Ms. Olga Moir
Director, Project VALUE
Professional Resources Center

Mr. Don Griffin
Director, Interinstitutional Workshop

Dr. Samuel Mangione
General Education Services

Mr. David Frankel
Linker, Project VALUE

Dr. Rae Levis
Associate Superintendent
State and Federal Programs

Ms. Kathryn Mathey
Special Education

Ms. Karen Roth
General Education Services

Ms. Donna Sewrey
Special Education

Dr. Karen Urbschat
Linker, Project VALUE

Ms. Viola Walker
Linker, Project VALUE

Michigan Department of Education

Dr. John Osborne
Coordinator for Dissemination

Dr. Philip Hawkins
Director, Office of Planning

Dr. Rachel Moreno
Program Coordinator

Ms. Edith Jansen
Information Specialist

Ms. Patricia Slocum
School Library Media Consultant

Detroit Public Schools

Ms. Helen Hart
Director, Staff Development
and Teacher Training

Mr. John Ruddon
Curriculum Administrator, Region 2

Ms. Ella Randolph-Cooke
Principal
Jackson Middle School

Ms. Joanna Dulemba
Reading Specialist
Western High School

Mr. Edward Williams
Principal
Ludington Magnet Middle School

Ms. Aretha Marshall
Central Schools and Alternative Programs

Livonia Public Schools

Mr. Kenneth Cogswell
Language Arts Coordinator

Ms. Marie Canzoneri
Sixth Grade Teacher
Hoover Elementary School

Ms. Esther Heusner
Curriculum Director

Ms. Clara Catallo
Coordinator of Instructional Programs

Woodhaven Public Schools

Mr. John Schultz
Assistant Superintendent

Mr. Dominick Palazzolo
Principal
Yake School

APPENDIX A

Results of 1979-80 Survey of
Participants in Interinstitutional Workshops

1979-1980

Name _____

School _____

District _____

University with which you are enrolled for this workshop.	MSU - 7	WSU- 28	None - 1
	U of M- 6	EMU- 23	No response- 1

University with which you are regularly enrolled for a graduate degree.	MSU - 7	WSU - 20	None - 5
	U of M - 3	EMU - 19	Oakland - 2
			No response - 10

Do you plan on transferring credit from the workshop?	Yes ()	No ()	No response
	27	1	8

What is the highest degree you have received?	BA - 44	Masters - 18	Doctors - 1	Associates - 1	No response - 2
---	---------	--------------	-------------	----------------	-----------------

Are you currently working toward a degree? Yes () 44 No () 20 No response 2

If so, what degree? Certification - 1 Specialist - 11 Towards 18 hours - 2
Masters - 33 BA - 1 No response - 25 Doctors - 1 Science 1

Do you plan to apply credit from the Interinstitutional Workshop toward a degree?

Yes (5)	No (12)	No response (3)
-----------	-----------	-------------------

	MSU	- 6	MSU	- 19	Oakland	- 1	
If so, with which university	U of M	- 5	EMU	- 16	No response	- 13	Undecided 1

1. To what degree do you feel your workshop efforts are beneficial to pupils in your classes?

None	A Little	Some	A Lot	Extremely
1	1	19	33	12

Comment or explain your rating:

2. To what degree do you feel your workshop efforts are beneficial to self-improvement?

None	A Little	Some	A Lot	Extremely
0	4	21	31	11

Comment or explain your rating:

3. To what degree do you feel your workshop efforts are beneficial to school or school district operation?

None	A Little	Some	A Lot	Extremely
0	3	12	30	21

Comment or explain your rating:

4. To what extent have your personal goals for the workshop been achieved?

None	A Little	Some	A Lot	Completely
3	4	21	26	13

Comment or explain your rating:

5. How would you rate the quality of coordinator or consultant assistants?

Poor	Satisfactory	Excellent
5	21	38

Comment or explain your rating:

6. How effective do you feel the general sessions have been in providing help on issues that cut across all team problems?

Not Effective	Somewhat	Quite	Very Effective
11	39	13	3

Comment or explain your rating:

7. How effective do you feel the general sessions have been in providing opportunities for your team to get together with teams working on a similar problem?

Not Effective	Somewhat	Quite	Very Effective
34	16	5	1

Comment or explain your rating:

8. How do you now rate the problem selected by your team?

Inappropriate	Appropriate	Ideal
1	33	29

Comment or explain your rating:

No response 1

9. How well do you feel your team leader (not team coordinator) served the team?

Poorly	Adequately	Excellent
1	13	45

10. How much support have you received from your central administration in your workshop efforts?

None	Adequate	Total
7	29	30

Comment or explain your rating:

11. To what degree have you implemented your goals for the workshop in your school?

None	A Little	Some	A Lot	Completely
7	3	17	27	12

12. To what extent do you feel you know what your next steps should be for implementing your workshop efforts?

Have Quit Trying	Uncertain	General Direction	Quite Certain	Positive
1	4	14	27	20

Comment or explain your rating:

13. The workshop runs for sixteen weeks of formal sessions. How do you feel about when it should start and end during the school year?

Earlier	Later	As is
9	4	51

Comments:

14. At present, participants earn four semester or six term hours credit for meeting four hours per week including forty minutes for dinner. What do you feel should be provided in terms of the amount of time and credit?

Less	More	As is
2	6	56

Comment or explain your rating:

15. Please identify features or aspects of the workshop (if any) that you feel contributed to your success in achieving your goals.

Comments:

CASE STUDY NO. 2:
THE EDUCATIONAL IMPROVEMENT CENTER-SOUTH

I. INTRODUCTION

This case study describes the interorganizational arrangement involving the Educational Improvement Center-South (EIC-South) and describes the knowledge utilization activities that are being undertaken by the EIC. The case study is based on information received through interviews with staff of EIC-South and with others involved in the arrangement, specifically individuals within the New Jersey Department of Education, the county offices of the Department of Education, and local school districts. Information has also been drawn from documents obtained during the course of the fieldwork. The information was collected throughout 1979-1980.

The case study is organized into three sections. Section I gives the general background for the interorganizational arrangement. Section II then describes the operation and the outcomes of three types of knowledge utilization services that are being provided by the EIC-South, and Section III analyzes the reasons for the success of these services.

The Educational Improvement Center-South

The EIC-South is an independent governmental unit that provides services to 144 public school districts located within a six-county region in southern New Jersey. The EIC is one of four educational improvement centers in the state. Although each of the centers provides similar types of services, the EIC-South stands out from the others by being the oldest of the four. As such, the EIC became the model for the organization of the state's system of regional education agencies.¹

EIC-South began operating in 1968 under an ESEA Title III grant of \$55,000. With a staff of only two in the first year--a director and a secretary--the EIC mainly provided assistance to districts in writing proposals for state and federal funds. This involved consultant assistance, as well as obtaining relevant materials. Within one year, the center grew to

¹There is considerable variation in the names used for these agencies (e.g., intermediate service agencies, educational service agencies, and regional education service agencies). We have selected the term "REA" as the most appropriate parallel to the prevailing use of "SEA" and "LEA", which refer to state and local education agencies, respectively.

an organization employing five professionals and three support staff and having an operating budget of \$225,000. The functions of the center also broadened. In the second year, the EIC was providing some consultant services and was expanding its information retrieval service.

Currently, the center is operating with a staff of over 90 and with a budget of \$3 million. (Table 1 shows the funding sources for 1979 and 1980.) Only knowledge utilization services are offered by the center; no direct (administrative or instructional) services are provided. The knowledge utilization services include consulting assistance, workshops and inservice training sessions, media and production services, and an information retrieval service. They also include several special projects, including one on nutrition education, an institute for political and legal education, and a gifted and talented project.

EIC-South as One of Four State-Mandated Centers

Although the EIC-South has existed as a regional service agency since 1968, it has only recently been formally recognized by the state. In 1977, the New Jersey legislature passed a law establishing a network of four educational improvement centers. Besides the EIC-South, the EICs in the state are:

- o The EIC-Northwest, located in Morris Plains. This center was established to serve 158 school districts in six counties in the northwestern part of the state.
- o The EIC-Central, in Hightstown. The EIC was created to provide services to 149 school districts in five central New Jersey counties.
- o The EIC-Northeast, in West Orange. The EIC was founded to serve school districts in four counties.

These centers were to operate as regional offices of the New Jersey Department of Education. One year later, however, the 1977 law was repealed and another law was enacted, which set up the four centers as independent units (New Jersey, 1978). Under this legislation, which is the legislation under which the EICs are currently operating, the EICs were established as intermediate school districts (analogous to LEAs, but at the intermediate level) and thus became able to apply for and receive federal funds.¹

¹

Previously, federal funds could come to the educational improvement centers only through a local school district. Thus, the Title III grant under which the EIC-South first operated was applied for by a school district (an LEA) in southern New Jersey and was then used by the district to set up the regional center now known as EIC-South.

Table 1

AMOUNT AND SOURCE OF OPERATING FUNDS FOR EIC-SOUTH
(FY 1979 and FY 1980)

FUNDING SOURCE	FY 1979		FY 1980	
	No. of Staff	Total Funds	No. of Staff	Total Funds
Appropriated State Funds	22.5	\$ 605,378	18.5	\$ 605,360
Other State Funds	5.5	251,738	11.5	434,636
Federal Funds	55.0	2,044,076	64.0	1,968,783
TOTAL	83.0	\$2,901,192	94.0	\$3,008,779

Source: EIC, 1980a

In addition to establishing the EICs as independent units, the new legislation included three other major provisions. First, the legislation required each EIC to have an independent governing board, composed of representatives of the client groups to be served by the centers (i.e., teachers, administrators, school board members, parents, and students). The intent of the requirement was not only to make the EICs independent, but also to assure that the foremost concern of the centers would be to serve local school districts. A statement to the Assembly Education Committee (1978) said:

. . . This legislation was drafted to ensure separation between the EICs and the [State] Department [of Education]. The new governance structure was designed to ensure that the EICs will be responsive to the needs of local districts and teaching staff members.

Second, the legislation gave the EICs fiscal authority. With the new legislation, the EICs were thus able to receive their own funds directly. (Previously, each EIC had to depend upon a local school district to serve as an intermediary in the allocation of state and federal dollars.)

Third, only knowledge utilization services were to be provided by the EICs. The types of services that each center was to offer were specified in the legislation:

- o Assistance in the diagnosis of educational problems and in the identification of alternative solutions to the problems;
- o Services that would provide information and materials on instructional and management processes and programs;
- o Staff development and training;
- o Consulting services, particularly to provide assistance to districts during the implementation of an educational program or process; and
- o Any other service requested by the governing board of the EIC, citizen advisory committees, or parent associations, such as parent-teacher associations and parent advisory councils.

Given these general requirements, each EIC designed its own service program. As one might expect, the emphasis that the four centers have placed on the different types of services, both in terms of staff and resource commitment, has varied (Mills, 1980). EIC-South, for example, has an extensive information retrieval service, and EIC-Central emphasizes field-based consulting services.

Funding for these knowledge utilization activities may come from several sources. The state annually appropriates funds for the EICs. This appropriation is based on an EIC's and the state department's assessment of the needs of the clients that the EICs serve, and appears as a line item in the state department's budget. The major portion of an EIC's budget comes from state and federal grants. This heavy reliance on categorical funds minimizes, to some extent, the EICs' flexibility to respond to state and local priorities, and, along with the uncertainty about the amount of the state's annual appropriation, creates some instability in the EICs' service program and staffing from one year to the next.¹ Problems associated with the current funding situation have received increasing attention within the state department of education, and there has been some discussion about changing the state appropriation so that it is based on some sort of formula (Haughey, 1979), thereby making the amount of state funds the EICs receive each year at least more predictable.² The funding situation has important implications for the success of the services provided by the EIC and will be discussed later in this case study.

All local school districts in the state fall within the catchment area of one of the four EICs. The catchment area boundaries are drawn to coincide with county lines (see Figure 1). Although the geographic area covered by each EIC differs, and in the case of the EIC-Northeast, differs quite substantially, the number of school districts served by each of the four EICs is roughly equal (see Table 2). EIC-South serves 144 school districts, which contain 478 schools and employ nearly 13,000 teachers (see Table 3).

Related Activities in the State

Other Types of Intermediate Agencies. Several activities and conditions in the state are directly related to the EICs' activities. In fact, New Jersey has built a complex system of regional education

¹ All staff within EIC-South, for example, receive notice at least 60 days before the end of the fiscal year of the possibility of their being terminated because of budget cuts (Operations Study, 1980).

² Whether such a change would affect the amount of funds each EIC would receive from the state would, of course, depend upon how the formula was developed.

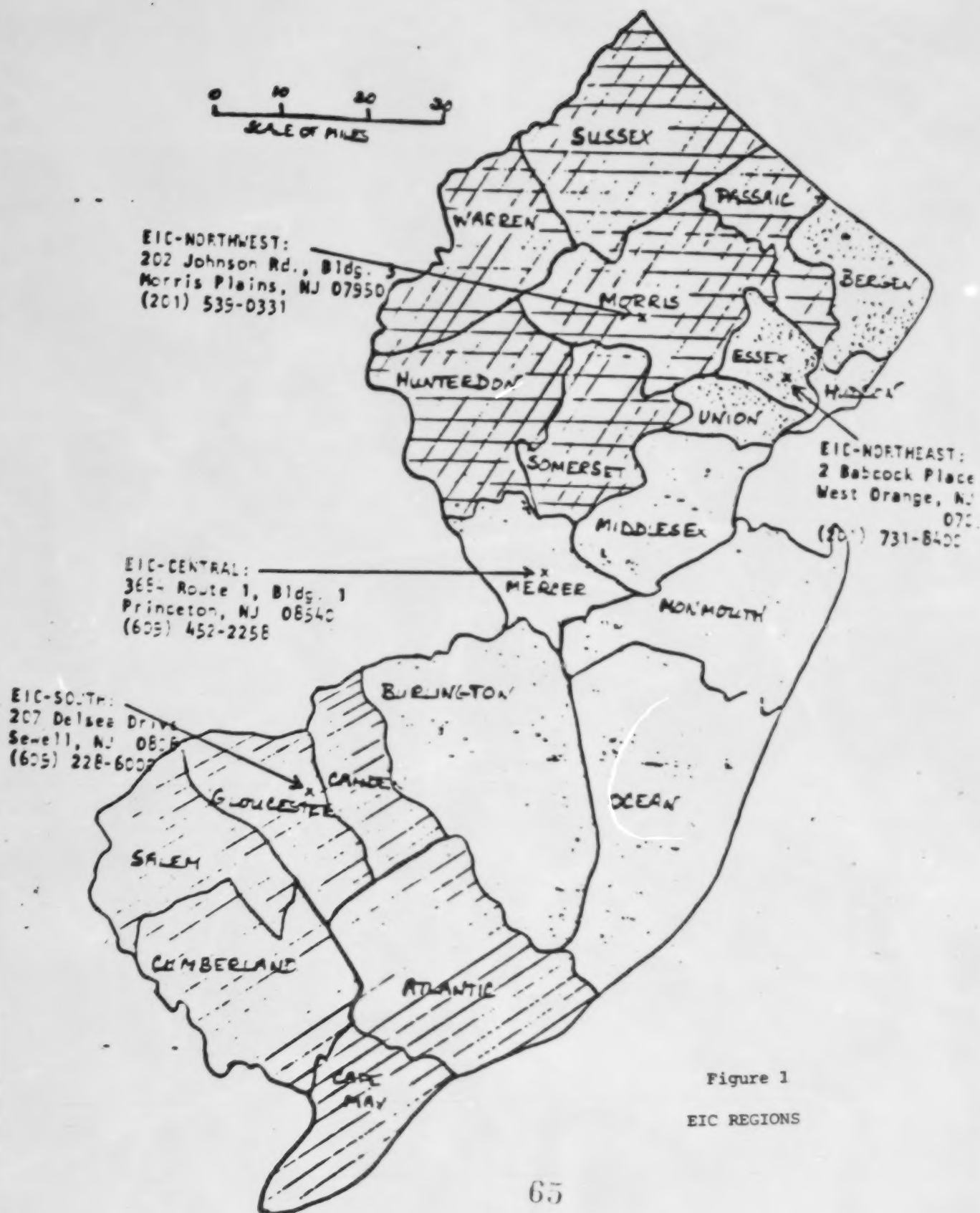


Figure 1
EIC REGIONS

Table 2

CHARACTERISTICS OF THE FOUR EIC REGIONS
(Percentage of State Total)

EIC Region	School Districts	Schools	Teachers	Geographic Area
Central	27%	27%	29%	33%
Northeast	23	34	37	7
Northwest	27	20	19	31
South	23	19	15	29
State	100%	100%	100%	100%

Source: Haughey, 1979

Table 3

NUMBER OF CLIENTS SERVED BY THE EIC-SOUTH

Type of School	Districts	Schools	Teachers	Students
Public	144	478	12,810	236,650
Parochial	1	82	1,148	29,068
Private	—	13	NA	2,013
TOTAL	145	573	13,958	267,731

-- Not applicable

NA - data are not available

Source: EIC, 1979a

agencies. In addition to the four educational improvement centers, there exist several other types of regional agencies in the state, which mainly provide administrative or instructional services to school districts (see Table 4). The two types of intermediate agencies that relate most to the EICs are the Educational Service Commissions (ESCs) and the County Offices of Education.

Nine ESCs exist in New Jersey and have been established by the voluntary action of local school districts (Mills, 1980). The ESCs provide direct services to districts on a fee-for-service basis. The services consist of transportation services, special education instruction and support services, and adult education. No formal collaboration currently exists between the ESCs and the EICs, although there is concern among some in the state department that the functions performed by these two types of regional agencies may eventually overlap, unless the state makes the missions of the two types of organizations more explicit (Mills, 1980). Others within the state believe that one option in the long term would be to combine the ESCs and EICs, and that this would not only alleviate the problem of potential overlap, but would also assure the survival of the services that these two agencies now provide. Still others, however, believe that this is not a viable solution and that with continuing budget shortages knowledge utilization services will remain in jeopardy.

The county offices, which exist in each of the state's 21 counties, are regional offices of the state department of education and are primarily involved in monitoring local districts' compliance with state and federal laws and regulations. This responsibility has grown in the last five years, supplanting some other functions.¹ The change occurred with the enactment of the Public School Education Act of 1975. The Act brought the New Jersey education system under comprehensive legislation requiring that all children be provided with a "thorough and efficient" (T&E) system of education (Wise, 1979).

¹ Prior to 1975, the county offices were also involved in providing technical assistance to school districts, similar to the services that are now being offered by the EICs, but on a smaller scale. The county offices still offer some workshops jointly with the EIC in their region, but no longer are seen as the primary providers of knowledge utilization services to school districts.

Table 4

TYPES OF REGIONAL EDUCATION AGENCIES
IN NEW JERSEY

Type of Agency	Number
Educational Improvement Centers	4
County Offices of Education	21
County Vocational Schools	20
Special Education Districts	2
Educational Service Commissions	9
Jointure	1
Audiovisual Aids Commissions	21
Regional Day Schools (projected)	11
County Special Services School Districts	4

Source: Mills, 1980

Thorough and Efficient Legislation. The T&E law outlined the specific requirements of New Jersey school districts and of the state:

A thorough and efficient system of free public schools shall include the following major elements, which shall serve as guidelines for the achievement of the legislative goal and the implementation of this act:

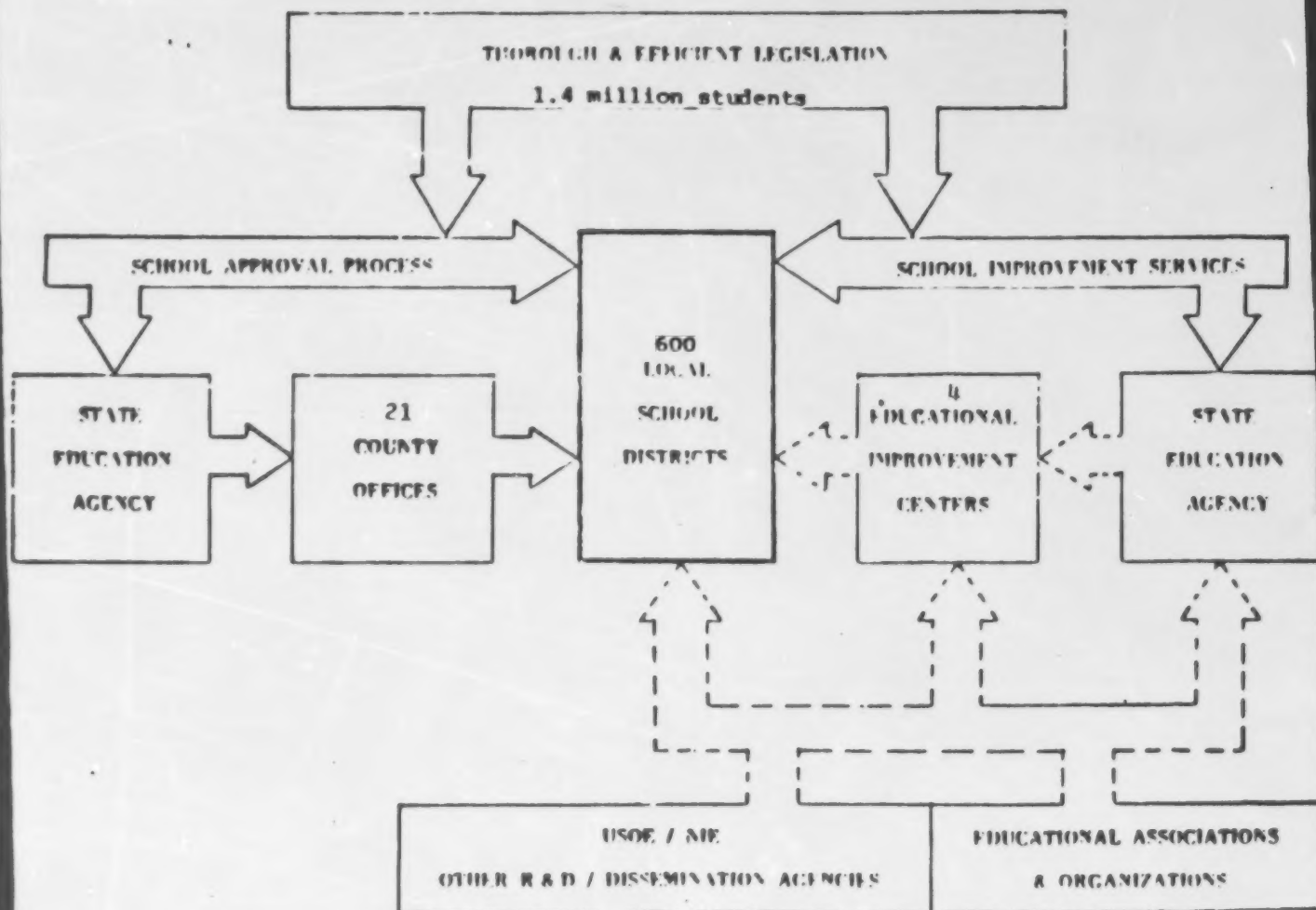
- a. Establishment of educational goals at both the state and local levels;
- b. Encouragement of public involvement in the establishment of educational goals;
- c. Instruction intended to produce the attainment of reasonable levels of proficiency in the basic communications and computational skills;
- d. A breadth of program offerings designed to develop the individual talents and abilities of pupils;
- e. Program and supportive services for all pupils especially those who are educationally disadvantaged or who have special educational needs;
- f. Adequately equipped, sanitary and secure physical facilities and adequate materials and supplies;
- g. Qualified instructional and other personnel;
- h. Efficient administrative procedures;
- i. An adequate state program of research and development; and
- j. Evaluation and monitoring programs at both the state and local levels.

The county offices of the state department of education and the EICs were given an integral role in the implementation of the T&E legislation (see Figure 2). The county offices were to monitor the progress of schools in meeting the T&E law. The statute required:

A uniform statewide system for evaluating the performance of each school. Such a system shall be based in part on annual testing for achievement in basic skill areas, and in part on such other means as the commissioner deems proper in order to (a) determine pupil status and needs, (b) ensure pupil progress, and (c) assess the degree to which the educational objectives have been achieved.

Figure 2

ORGANIZATION FUNCTIONAL DIAGRAM



The EICs were to provide technical assistance to schools in their implementation of the requirements of the T&E law. Although the initiative for providing assistance was expected to come primarily through direct requests to the EIC from individuals in the schools, the commissioner was also given explicit authority in the statute to "order in-service training programs for teachers and other school personnel." When such requests are made, they usually come through the county office. Thus, if the county office finds a school out of compliance with the T&E law, it might suggest that the district seek assistance from the EIC.

An informal relationship, therefore, has developed between the county offices and the EICs. Although the two types of agencies are not mandated to work together, the EICs and the county offices do communicate frequently. EIC-South, for example, sometimes informs the county office of workshops and consulting assistance that have been provided to a school within the county. The six county office superintendents in southern New Jersey also meet with the EIC-South director to discuss general needs within the region and to plan future activities. These meetings, which are scheduled once-a-month, serve to ensure a coordinated system for assisting schools in complying with the T&E law.

Other Legislation in the State. New Jersey has other legislation that directly affects the schools in the state and, as a result, influences the services in which the EICs become involved. In December 1979, legislation was enacted to establish high school graduation standards. The requirements, which are to be fully operative beginning with the 1981-1982 school year, specify that all high school students must be tested in reading, writing, and computational skills, and must meet a basic level of competency before being allowed to graduate. School districts in the state are required to establish local standards, at least equal to standards set by the state, for minimum competency of their graduating students (Braun, 1980). School districts are currently planning revisions in their curriculums to meet the state's requirements and, for example, have called on the EIC-South for assistance in improving their instructional programs.

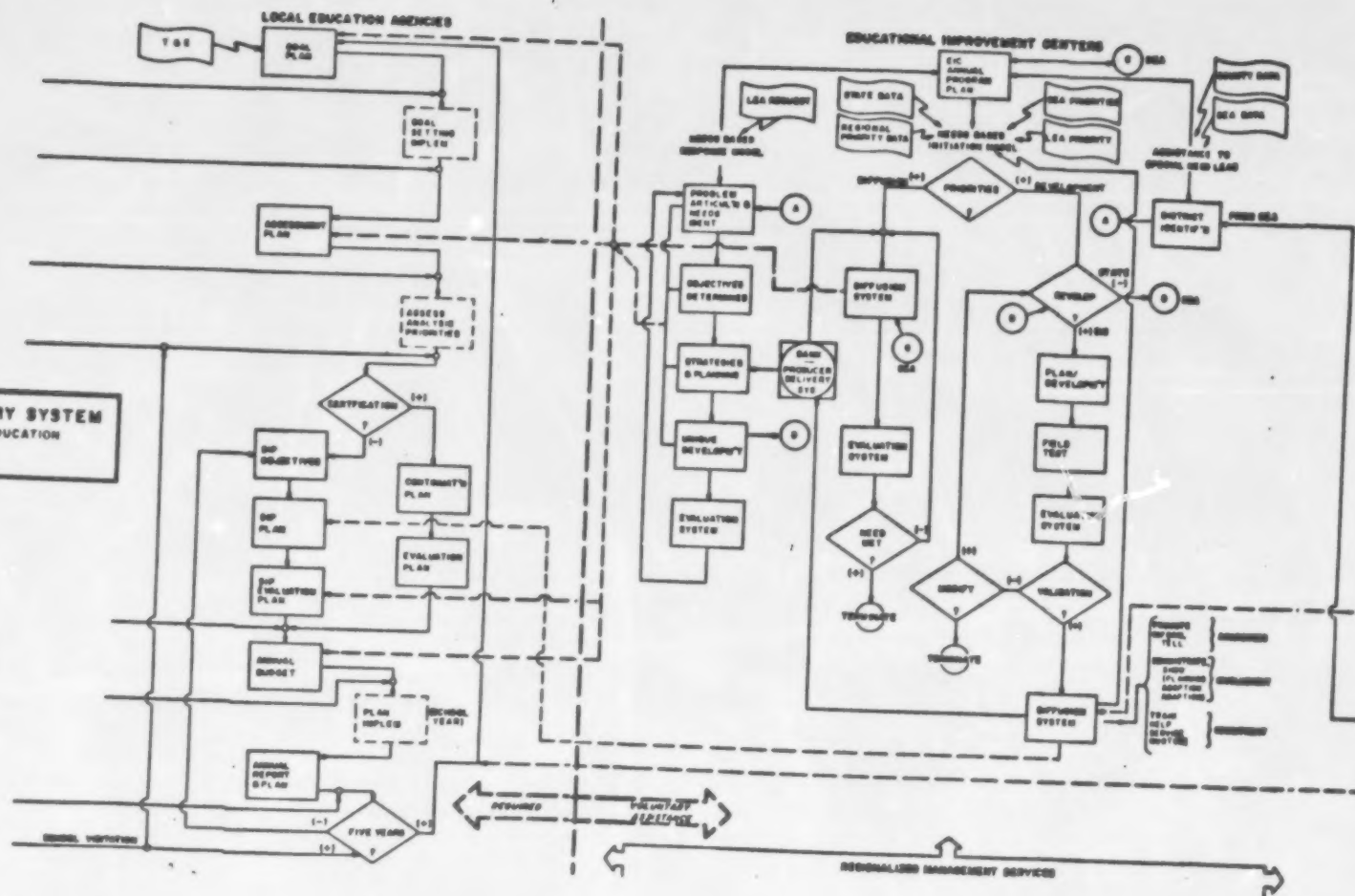
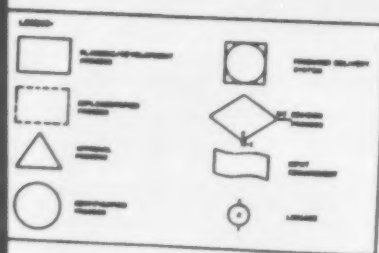
The state also mandates the evaluation of all tenured teaching staff in local school districts. Although the evaluation is conducted at the local level, by administrators within the school districts, the county

offices and the EICs are very much involved in the process. The county offices are involved at a formal level; as for all state legislation, they are responsible for monitoring districts' compliance with the state law. Thus, districts annually report to their county office on the outcomes of the evaluation. The EICs become involved in the process more informally by providing technical assistance to district staff on the procedures for carrying out the evaluation. Districts usually are the ones to initiate specific requests to the EIC. School districts, for example, have asked EIC-South for evaluation models and for workshops on the evaluation process. EIC-South has also become involved in providing in-service workshops for professional staff, which are offered as a result of the evaluation findings for a particular district.

The EIC also performs a proactive role by anticipating local needs, which are often those needs that are expected to arise as a result of state mandated requirements. The EIC, for example, searched for models for conducting the required teaching staff evaluation. In addition, it informed the districts of the state requirements, introduced a variety of procedures for performing the evaluation, developed models when existing ones were inappropriate, trained administrators and other school staff in carrying out the evaluation, and prepared its own staff to provide assistance to the school districts, if such assistance was requested. The reactive and proactive roles played by the EIC correspond to the models--the needs-based response model and the needs-based initiation model--suggested by the state department (see Figure 3).

In addition, the EIC is beginning to follow the third model--assistance to specialized needs districts--to a greater extent. This is possible, in part, because of a new system of classifying schools. This system has several parts, one of which is called the comprehensive basic skills review (CBSR), which classifies schools according to whether they have improving, stable, or declining test scores in the basic skills. This review is conducted by a comprehensive review team, whose members have been designated by the county office. The EIC is involved in the process at its conclusion, when it is invited to attend the exit conference. During the conference, necessary remedial action is planned, and the EIC therefore is able to target its efforts towards those schools with the greatest needs.

THOROUGH & EFFICIENT DELIVERY SYSTEM
NEW JERSEY STATE DEPARTMENT OF EDUCATION
DATE: 18 SEPTEMBER 1976



Pass-Through Funds. The New Jersey state department serves as the conduit through which some federal funds for knowledge utilization activities flow. These funds--e.g., ESEA Title IV-C funds, NDN state facilitator funds, and ESEA Title VI-B funds--provide the EIC-South with money for specific knowledge utilization services. Although the federal grant awards are, in some cases, annual awards and continued funding therefore cannot be guaranteed, these funds do support a basic portion of the knowledge utilization services provided by the EIC-South. Title IV-C, for example, supported the information retrieval service in the EIC through September 1980 and partially supported the consulting and staff development services in the basic skills. During the 1980-1981 school year, Title IV-C funds support the development of a community education program, parent involvement programs, the Institute for Political and Legal Education, and the Institute for Creative Education.

Knowledge Utilization Activities in the EIC-South

To understand the activities of the EIC network, it is necessary to examine several specific knowledge utilization services in which the center has become involved. The services fall within three broad categories: information retrieval services, in-service workshops and other kinds of staff development training sessions, and linking agent services. All of these services exist within EIC-South and will be described in Section II of this case study.

All services provided by the EIC may be classified as knowledge utilization services. The services are offered by a staff consisting of both generalists and specialists. The staff for the information retrieval service, for example, are generalists; their knowledge is not limited to a specific instructional area. Staff who are involved in providing in-service workshops and linking agent (or consulting) assistance, however, are largely specialists. The same staff member offers both types of knowledge utilization service for the instructional area in which he or she specializes and determines the delivery strategy--workshop or consultation--by analyzing the specific need of the district or the individual making the request. Thus, the services are expressly designed for the client.

The whole array of programs and services provided by the EIC-South cannot be examined in this case study. Thus, each of the three types

of knowledge utilization activities will be described, and particular emphasis will be given to those services that focus on the basic skills.¹ The three types of activities fall within two of the EIC's four organizational units (see Figure 4). The information retrieval service falls under the information services unit, and the in-service workshops and linking agent services fall under the consulting services unit. No single individual directs each of these units. Instead, the director of the EIC directly oversees the knowledge utilization activities within the two units. The absence of a bureaucratic organization allows the EIC greater flexibility and, according to some staff, has resulted in greater coordination and cohesiveness among the staff.

Within the three categories of knowledge utilization activities, the actual services and programs that are offered by the EIC are primarily determined by the needs of the schools within the region. This strong local orientation can be explained, in part, by the center's origination as a district-sponsored service agency. In addition, most of the staff share the philosophy that as an agency whose primary clients are teachers and local school administrators, it is their needs that should be foremost.

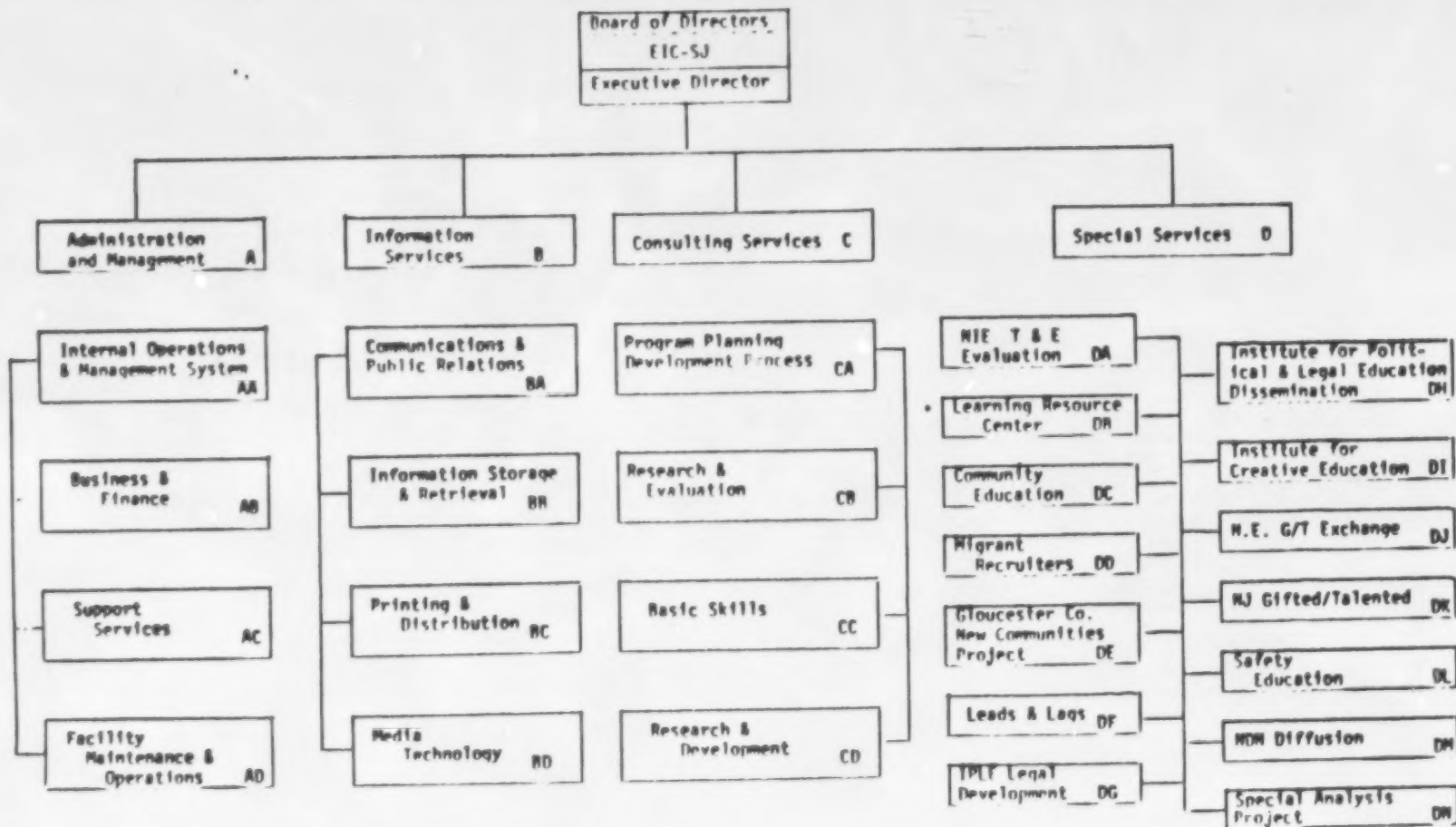
This orientation has had to be adapted to changing external conditions. With the enactment of the T&E law in 1975, the needs of local districts changed dramatically. Schools became less concerned with implementing innovative practices and become more directly concerned with responding to the legislative mandates, which were often administrative in nature. Although changes made by schools in response to the T&E law are often innovative, they are changes that have been imposed on the districts, rather than changes that have been made solely at the district's initiative.

The state department's influence on the activities of the EIC is also reflected in documents produced within the department (see Gappert and Ogden, 1976). The state department, for example, has incorporated the EICs into the state's model for complying with the various legislation affecting schools. The EICs are expected to conform to the models and even to initiate activities in schools where needs are greatest, (i.e., where

¹ The knowledge utilization services within EIC-South are not identified as projects and therefore boundaries on the more generic categories of knowledge utilization activities are difficult to assign. Focusing on services in the basic skills allows the services to be described and yet imposes some limits on the investigation.

Figure 4

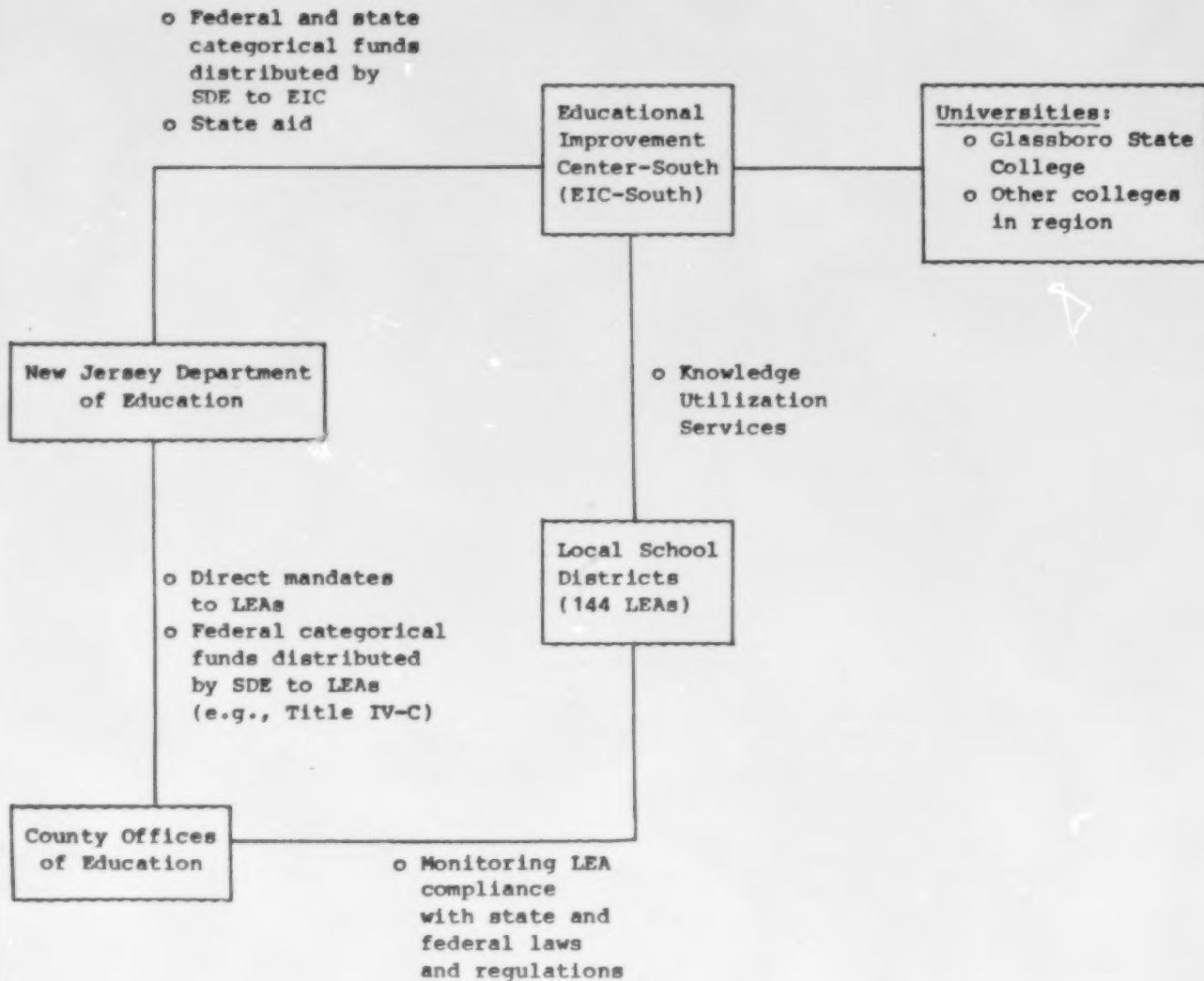
EIC ORGANIZATION CHART



compliance with the various legislative mandates has been most difficult). This dichotomy of, on the one hand, responding to local needs and, on the other, responding to state priorities and expectations is sometimes problematic for the EIC-South and will be discussed in Section III of this case study. The relationships among the different educational organizations and the roles played by each are depicted in Figure 5.

Figure 5

ORGANIZATIONS INVOLVED IN KNOWLEDGE UTILIZATION SERVICES



II. INTERORGANIZATIONAL ARRANGEMENTS FOR KNOWLEDGE UTILIZATION

The EIC-South operates within an interorganizational arrangement that spans several levels and includes several different types of organizations. In addition to the EIC, four other types of organizations are involved in the arrangement (see Figure 5). First, the New Jersey state department of education provides funds to the EIC for some of its knowledge utilization activities and generally oversees the activities in which the EIC is involved. Second, the county offices of education, as the monitoring arm of the state department, monitor local schools for compliance with state and federal mandates and provide information to the EIC about the needs of schools and districts. In addition, the county offices jointly sponsor some knowledge utilization services with the EIC. Third, the school districts in southern New Jersey call upon the EIC for information and administrative and other program assistance. Administrators and teachers within the school districts are the primary users of the EIC's services. Fourth, other organizations--local universities, other EICs in the state, departments of education in New Jersey and other states, and other information and dissemination agencies--are also occasionally involved, either as users of the services provided by the EIC or as providers of resources.

A particular organization may not participate in all services that fall within the more generic type of knowledge utilization activity. Moreover, even within an activity, the extent to which each of the organizations in the arrangement and the departments within these organizations are involved in specific knowledge utilization services varies according to the service. As yet one more variation, a particular organization may, at times, be a user of the services provided and may at other times be a collaborator in the provision of the services.

These variations mean that a closer look at the specific types of activities and services offered by the EIC is necessary if the operation of the interorganizational arrangement is to be explained. This section will therefore look at three different types of knowledge utilization services separately and will describe the interorganizational and interpersonal network that exists for each service. The outcomes of the three types of knowledge utilization services will also be discussed.

Information Retrieval Service

Description of Service. The information retrieval (IR) service is the oldest of the EIC's knowledge utilization services, having existed since 1969. Prior to 1980-1981 the service was supported by ESEA Title IV-C funds; currently, however, it is supported by funds from the EIC's annual appropriation from the state. The service, which operates with a staff of five, provides written materials on approximately 2,200 topics and subtopics to administrators, teachers, students, and parents. The topics vary widely, from instructional areas such as reading and language arts, aerospace, and history to administrative topics such as the T&E law, testing, and evaluation. Other topics of relevance to educators are also included, such as parental involvement, child development, and affirmative action.

The topics, although comprehensive, are not meant to limit the subjects on which information may be requested. Information may be requested on any topic, and if no information on that topic is available in the files, the staff of the information retrieval service will conduct a search for the information. In addition, the staff may develop materials, often by adapting existing products. The result is that the users of the service are almost always given some information relevant to their request and usually do not have to go to additional sources for information.

Most of the searches conducted by the staff are manual searches. The EIC has access to journals, popular magazines, newsletters, ERIC and other bibliographies, and other reference materials. These are consulted often, both for information necessary to meet a request and for material to add to the vertical files that are stored at the EIC. Actual materials are given to the individual making the request, with 25 pages copied at no cost. A nominal fee is charged for additional pages.

Acquisition of materials for the information retrieval service is far from static. The staff continually search for new information, read journals and magazines as they come out, and keep informed of research findings. Additional written information is sometimes requested on a topic from the authors of journal articles and research reports. No strict quality control criteria are applied to the material. Rather, if the information is relevant to current or anticipated needs within the school districts or if the material just seems interesting, the staff of the information retrieval service will add the information to the files. In addition to information

acquired through secondary sources, the director of the information retrieval service has written to the 60 largest school districts in the country, asking for information on successful educational practices within the districts. The EIC, upon receiving materials on successful practices, often reproduces all or part of the materials and makes them available to users at minimal cost. Some materials are also developed by the staff. These materials include curriculum materials, as well as survey information on the special education services offered by districts within each state.

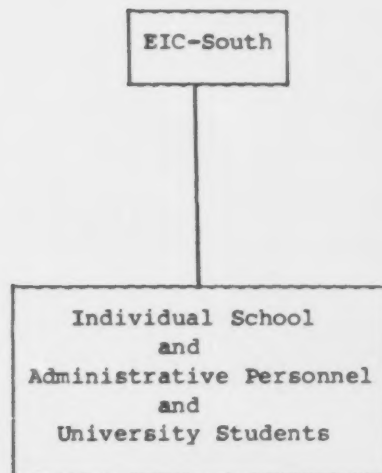
The Interorganizational Arrangement. The interorganizational arrangement for the information retrieval service consists primarily of individuals and thus is primarily an interpersonal one. Teachers, administrators, and students who want to use the service may request information directly from the EIC staff and are not required to go through an intermediary or get approval from the district's central office. The requests for information may be made by telephone, in which case the user usually receives the information requested within two days, or the individual may come into the center and make the request in person.¹ Although searches are most often done with the assistance of the staff of the EIC, the user, when at the center, also has direct access to the files of information and is encouraged to look through them.

The only relevant interorganizational linkages are those between the EIC and the school districts within the EIC-South region (see Figure 6). However, the arrangement is interorganizational only to the extent that the users of the services are primarily individuals that are employed by the districts or are students attending the schools that fall within the EIC's jurisdiction, and thus, because of this relationship know that they are welcome to use the information retrieval service. No formal agreements exist between the information retrieval service and the districts.

¹ Staff of the information retrieval service prefer users to make requests in person. This allows the staff to discuss the user's particular question or problem in greater detail. In some cases, the requestor is referred to others within the EIC who also can provide the user with relevant information.

Figure 6

ORGANIZATIONS INVOLVED IN EIC-SOUTH'S
INFORMATION RETRIEVAL SERVICE



Similarly, no formal agreements exist between the state department of education and the EIC with respect to the information retrieval service. The staff of the EIC only occasionally seek information from the state department to meet a user's needs. Therefore, only with respect to funding might one say that a formal interorganizational agreement is present. When the service was funded by Title IV-C this office within the state department of education distributed money to the EIC to support the service and periodically monitored the activities undertaken with program funds. Currently, because the service is funded through the EIC's appropriation from the state, this linkage does not exist.

Service Outcomes. The information retrieval service is used extensively. In the six month period from July 1979 through December 1979, a total of 3,751 requests were received and responded to by the staff of the information retrieval service. Nearly half (48%) of the requests came from teachers, and over a quarter (27%) came from students. The remainder of the requests were made by administrators, supervisors, parents, and others. Students who use the service are primarily undergraduate and graduate students from Glassboro State College and tend to use the EIC's files for specific research projects. (See Table 5 for a summary of the use of the information retrieval service.)

After their requests have been fulfilled, the users of the service are asked to evaluate the service and to assess the quality of the information that was received. These evaluations have been extremely positive. Ninety-seven percent of the users rated the services as very good or excellent, and 86 percent rated the adequacy of the resources this high. In those cases where users have indicated that they believe there is an inadequacy of resources, the staff of the information retrieval service begins an extended effort to find additional information on the topic so that they may expand its resource collection.

The evaluation form that is filled out following clients' receipt of the information that was requested also asks clients to indicate the reason for which the request was made, and, together, the forms show that information is used for several purposes. More than a third (34%) of the users of the service between July and December 1979 indicated that the information was used to increase their knowledge of a certain topic or

Table 5

CLIENTS SERVED BY INFORMATION RETRIEVAL SERVICE

User	Number of Requests	
	7/79-12/79	9/78-6/79
Teachers	1,699	NA
Administrators	263	NA
Supervisors	403	NA
Parents	33	NA
Students	1,020	NA
Others	333	NA
TOTAL	3,751	9,055

NA - Not available

Source: EIC, 1980

instructional area. Other uses were also cited, however. A small percentage (3%) of the users said that they intended to use the information to make a decision concerning an educational issue; 25 percent said they intended to use the information to plan a new program in their school; and 28 percent said they would use the information in the process of modifying or improving an existing program in their schools. Thus, more than half of the users of the information retrieval service have said that they intend to use the information in their decisions and plans to take a specific action within the district. The majority of clients (87%) have requested information for either program or professional improvement (EIC, 1980).

Comments made by several users indicate that the service is highly valued. It provides teachers and administrators with a broad range of information and does so in a timely manner. The information is current and has proven valuable. Moreover, a repeated comment was that the staff of the information retrieval service invite use by providing in-person assistance in defining and then meeting specific individuals' needs. In addition, many users said that the staff and the center in general provide them with a comfortable and relaxed atmosphere in which to work. One former teacher, in fact, found the center so inviting that she resigned her teaching position and became one of the staff persons for the information retrieval service. Thus, user satisfaction appears to come from a feeling that specific needs are met through the information received, as well as from a feeling of welcome that the staff of the information retrieval service display to anyone wanting to use the service.

Consultant Services

Description of Service. Consultant (or linking agent) services are offered by the EIC on a variety of topics, including the implementation of the requirements of the T&E law, testing, program improvement in the basic skills, and gifted and talented education. A staff of specialists act as facilitators in the different instructional and administrative areas and work with the client--usually an administrator or a teacher--on exactly the type of assistance that is needed. Because the staff are responsible for providing consultant services and for organizing and offering workshops and staff development sessions, the EIC staff person may suggest one type of assistance or the other. When a client's need is such that in-person assist-

ance would be the most beneficial and when the need is felt more by one individual or a small group of individuals within the district or school than by a large number of persons in several districts, the EIC staff specialist will usually arrange for consultant assistance. The nature of the request may also determine the type of assistance that is provided. Thus, for example, if a teacher would like someone to demonstrate the use of a curriculum guide in his or her classroom or demonstrate a particular teaching strategy, consultant assistance is the only type of service that can be provided.

The consultation that is provided may vary in intensity. It may be as short as one hour or may last as long as a full school year. An example of the former was when an administrator called an EIC staff person to discuss the requirements of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap. The administrator called specifically to discuss the areas that had to be evaluated in the district to meet the law's administrative requirement.¹ In this instance, the assistance was provided over the telephone and lasted less than an hour. Longer consultations have also occurred, however. The staff person who specializes in all aspects of the T&E legislation, for example, has worked with districts throughout the year on various steps of the school improvement process. These consultations usually involve a small number of administrators, are provided at the school or the district's central office, and focus on one part of the four-step T&E process--goal setting, needs identification, program improvement planning, and program evaluation.

An equally important function that is performed by the EIC consultants is the development of educational materials. This occurs to varying degrees depending on the curriculum area and the source of funds for the project. All staff members, however, are involved in developmental work to some degree, in addition to their offering consultant assistance to teachers and administrators. Those projects receiving funds from special state and federal grants emphasize the development of original educational materials to a greater extent than others.

¹ The regulations for Section 504 require that each school district conduct a self-evaluation to determine the extent to which it is complying with the regulations and, if not in compliance, to discuss the specific remedial action that will be taken.

The Interorganizational Arrangement. Teachers and administrators may call the EIC directly to ask for assistance, and, as with the information retrieval service, need not seek permission from the district's central office or the school principal before making this request. If a client asks for a classroom demonstration or plans to involve the EIC facilitator in a long-term effort within the district, the superintendent of the district or the principal of the school is always informed of the service being provided. Although, no formal approval is required, informal approval is obtained.

Consultant assistance may be requested at any time. The use of the consultant service does not depend on formal interorganizational ties between the districts and the EIC. Interpersonal relationships between the EIC staff and the users of the consultant services, however, are important. Most of the EIC staff specialists are well known to those in the schools. They have worked in the EIC for several years and have lived in the southern New Jersey region for even longer. Teachers and administrators usually know immediately whom to call in the EIC when confronted with a specific problem and do not hesitate to do so. Assistance is often given over the telephone and is done so in an informal manner that encourages future requests for assistance.

No overall link exists between the consultant services within the EIC and a particular division or office within the New Jersey Department of Education. Linkages do exist, however, between the funding offices in the state department and that portion of the consultant services supported by state and federal grant funds. These offices include the Title IV-C office, the Title VI-B office, the state office for gifted and talented education, and the office for continuing education. Consultant services on some topics, however, are supported by the EIC's basic state grant and therefore have no formal relationship with the state department, except to the extent that some of these services address state priorities, such as the T&E law and its requirements. Because of districts' demonstrated need for assistance in meeting some of the state mandates, the Office of the Assistant Deputy Commissioner within the department, which distributes the state's annual appropriation to the EIC and generally oversees the EIC's operation, has a general interest in all services offered by the center. The Assistant Deputy Commissioner, for example, meets with the directors of each of the four EICs

monthly to discuss state, regional, and district needs and the services that are being provided to meet them.

An interorganizational tie to the state department of education might also be said to exist through the EIC's relationship with the county offices in its region. When a district shows difficulty in complying with state mandates or in implementing a process or program that is intended to put the district in compliance with state mandates, the state department may, through the county office, encourage the district to seek assistance from the EIC and for the EIC to provide it. More generally, the state department encourages the EIC to be proactive in providing assistance to districts in areas that would help them to comply with state laws. (The full interorganizational arrangement for the consultant services is illustrated in Figure 7.)

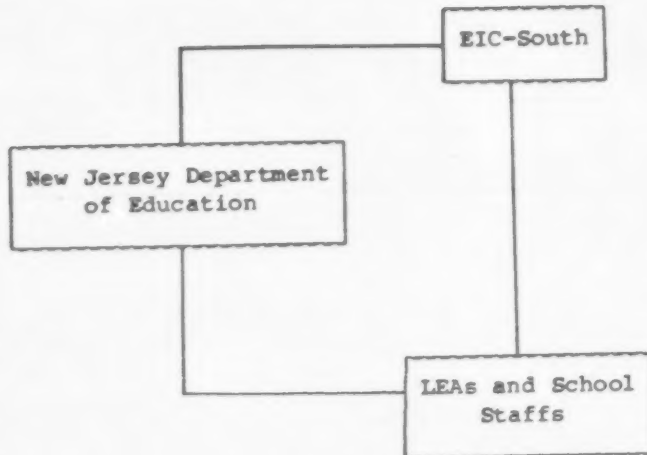
Service Outcomes. The EIC maintains records of the number of inquiries or requests for assistance that it receives each year. During the 1978-1979 school year, 1,053 consultations were held, and 5,791 administrators and teachers were served. (In many instances, consultations were scheduled with more than one individual, as in the case of an EIC facilitator providing assistance to a team of teachers or administrators in their identification of alternative solutions to a particular problem within the district or school.)

Those that have received consultant services have been satisfied with them. Comments on evaluation forms that are distributed after assistance has been received, note that clients' needs were met and that the information that was received was relevant and up-to-date. Teachers and administrators also said that the staff of the EIC were available when they were needed and were always willing to provide assistance to them.

Because the type of consultant assistance varies from: a) explaining provisions of a law and the requirements contained in accompanying regulations, to b) assisting schools in their adoptions of new curriculum products and their establishment of new educational programs, it is difficult to assess how many actual changes or improvements in school programs and practices occurred as a result of assistance provided by the EIC. Changes certainly are occurring, however. School districts are setting educational goals, as required by the T&E law, and have said that they have been able to do so because of the assistance they have received from the EIC. As another example, a district developed an educational product and submitted it to the

Figure 7

ORGANIZATIONS INVOLVED IN EIC-SOUTH'S
CONSULTANT SERVICES



Joint Dissemination Review Panel (JDRP) of the National Diffusion Network (NDN) for validation and received assistance from the EIC in preparing its application for JDRP review and then in packaging the product materials.

It must be noted, however, that the EIC's inability to cite actual frequencies with which change has occurred as a result of their involvement has led to criticism by some within the state department of education. These individuals in the department claim that positive affective ratings by users of EIC services are not sufficient evidence of the value of the services provided. They question, therefore, whether the state ought to continue to provide funding for the EIC when it cannot demonstrate through hard data its influence on affecting positive change in schools.¹

In-Service Workshops

Description of Service. The EIC offers workshops, seminars, and conferences on a range of topics. Two types of workshops are available. The first are those that are open to any teacher, administrator, or parent and are given on subjects that reflect the needs and interests of educators in the southern New Jersey region.² The second type are those workshops that are designed and offered to meet a specific need that exists in one or two districts or schools.

The first type--regional workshops--are announced at the beginning of each semester (fall, spring, and summer). A small fee is charged to pay for workshop materials. Except for those workshops held in the summer and those offered in conjunction with Glassboro State College, no graduate credits are earned for workshop participation. The workshops are scheduled during the school day, in the evening, or on a Saturday, last a half or full day, and are held either at the EIC facility or at a school in the area. Those held during the summer, however, are generally longer and may extend over a week or longer, with meetings scheduled each day. For these workshops, graduate credits are granted.

¹ This criticism has been made against all EICs in the state, not just EIC-South.

² The EIC conducts a needs assessment in the Spring of each year and uses it when planning its program and specific activities for the upcoming year.

The workshops are led by staff of the EIC (usually the same staff involved in the consultant services described earlier), by educators in the area, or by professors from colleges within and outside the region. Workshops offered during Spring 1980 have covered such topics as designing effective parent programs, how to develop and write a grant proposal in vocational guidance and counseling, and science for the gifted.

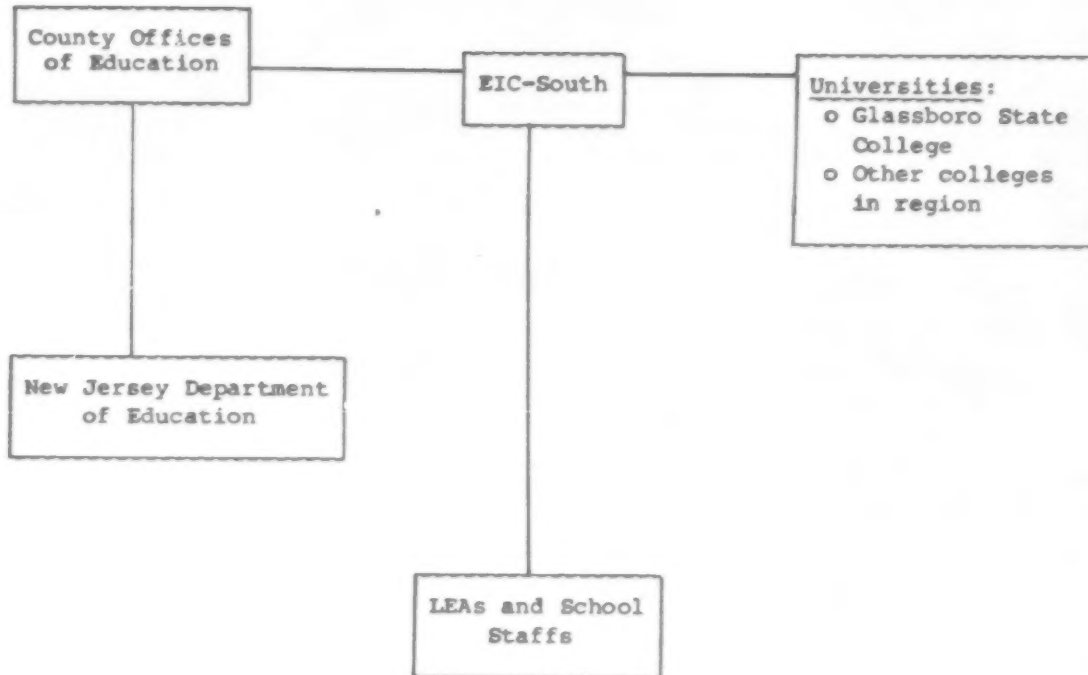
Workshops are also arranged when a district or a small number of districts has a need for which a regional workshop has not been scheduled. The need for such a workshop is determined when a district or school official--often an in-service coordinator, district superintendent, or building principal--calls one of the EIC specialists with a specific problem. During the initial conversation, the need is defined and the type of service that would be most appropriate to the need is discussed. If the problem or need is one affecting several individuals in different schools or different districts, a workshop is usually arranged. An EIC staff person usually conducts the workshop, sometimes inviting others in the region to participate. Most recently, workshops of this sort have centered around the requirements of the T&E law, tenured teacher evaluation, and requirements of other state and federal laws. However, workshops have also been offered on such topics as teacher effectiveness training, learning stations, and mainstreaming.

The Interorganizational Arrangement. Several organizations collaborate in the sponsorship of workshops provided by the EIC. (See Figure 8 for an illustration of the full interorganizational arrangement.) First, the EIC often works with professors at Glassboro State College and other colleges in the area, asking them to lead a workshop session. Arrangements are made with the college according to the specific need and according to the known expertise of the faculty. During Spring 1980 a workshop entitled "Putting It Into Practice: From Nutrition Information to Nutrition Application" was offered through Glassboro State College,¹ and graduate credits could be earned. Although jointly sponsored courses such as this one are not uncommon, no formal interorganizational agreements exist between the college and the EIC.

¹This course was jointly sponsored by the EIC, Glassboro State College, the New Jersey Home Economics Association, and the Philadelphia Dairy Council.

Figure 8

ORGANIZATIONS INVOLVED IN EIC-SOUTH'S
IN-SERVICE WORKSHOPS



Second, the EIC also works with the county offices of education and jointly sponsors regional workshops, usually on topics relating to state priorities or mandates. Workshops have covered topics such as professional improvement planning and compensatory education and the teaching of reading to children in kindergarten through third grade. The workshops are usually held either at the county office or the EIC and are jointly led by a staff person from the EIC and someone from the county office.

Several different organizations and individuals are also participants in the workshops that are offered by the EIC. Foremost among the users are teachers and administrators within the districts that fall within the catchment area of EIC-South. Parents of children attending schools in these districts may also attend the workshops. In addition, workshops have been held for students at the colleges within the southern New Jersey region, other EICs in the state, the state department of education, and school districts in other states as far away as Texas and Minnesota. No formal inter-organizational agreements for providing workshop services to individuals in these other organizations exist, however. Rather, the staff of the EIC respond to any request for service that they receive, and thus will do anything from sending information to a district in California on an NWN product that the EIC developed, to providing a workshop for EIC-Central or federal grants available for urban districts, to providing consulting services to a parent interested in programs for gifted and talented children.

Although no formal interorganizational agreement exists between the EIC and the state department with respect to the provision of specific workshops, the EIC receives funding from several offices in the department, and these funds pay for a portion of the services that are offered. Title IV-C funds for example, support any workshop on parent involvement and community education, and funds from Title VI-B support workshops on identification of handicapped children. Thus, as with the consulting services, linkages between the specialists that provide services on these topics and individuals within these program offices at the state level do exist. Communication, however, tends to be infrequent, and except for the flow of funds, the tie is not a particularly strong one.

Service Outcomes. For the period of July 1979 through December 1979, 146 regional, county, or multi-district workshops were provided and 153 workshops for individual districts were offered (see Table 6). Because workshops involve more than one participant, this knowledge utilization service served more individuals than any other knowledge utilization activity. During the 1978-1979 school year, for example, over 39,000 individuals attended workshops that were sponsored by the EIC.

Evaluation forms distributed at the conclusion of the workshops and returned to the EIC indicate that participants have generally been pleased with the skills and knowledge they have acquired through their participation (see Tables 7 and 8). As with the other knowledge utilization services, participants in workshops indicated that the information presented was relevant to their needs and that their requests for services were handled promptly.

Evaluation forms distributed during the 1978-1979 school year also asked participants to indicate what they planned to do with the information they had received during the course of the workshop. A large number of those who returned the evaluation forms said that they intended to use the skills or concepts obtained during the workshop in the classroom. An equal number indicated that they planned to share the materials and information they had picked up with their colleagues.

As with the consulting services, however, there is no way of knowing whether specific improvements in programs and practices have occurred as a result of workshop participation, even though some anecdotal evidence to this effect is available. For example, reading training packets were developed for one district during a workshop and a training program and manual on various components of staff evaluation were distributed following a workshop on the topic. Nevertheless, the lack of more detailed and systematic data on improvements in administrative or instructional practices has permitted some individuals in the state department to question the impact of the services provided by the EIC.

Table 6

KNOWLEDGE UTILIZATION SERVICES
 PROVIDED BY EIC-SOUTH
 (July 1979 - December 1979)

<u>Service</u>	<u>Number</u>
Regional Workshops	146
District Workshops	153
Consultants	185
Information Requests	3751
<u>Other</u>	<u>29</u>
TOTAL	4264

Source: EIC, 1980

Table 7

PARTICIPANTS' EVALUATION OF EIC REGIONAL WORKSHOPS
(July 1979 - December 1979)

Item	<u>Response Percent*</u>				
	N/A	Poor	Fair	Good	Very Good
Were the objectives achieved	0	0	2	34	64
Consultant knowledge	0	0	1	17	82
Presentation	0	0	5	14	81
Time of workshop	0	1	1	12	86
AV material	13	0	4	38	45
Group interaction	0	0	3	32	65
Overall evaluation	0	1	3	23	73

*500 evaluation forms were returned.

Source: EIC, 1980

Table 8

PARTICIPANTS' EVALUATION OF EIC DISTRICT WORKSHOPS
(July 1979 - December 1979)

Item	<u>Response Percent*</u>				
	Poor	Fair	Good	Very Good	Excellent
Met Needs	1	2	1	15	81
Handled Promptly	0	-	2	11	87
Relevant Information	0	1	3	15	81
Used Resources	2	2	2	14	80
Was Interesting	1	2	1	13	83

*132 evaluation forms were returned.

Source: EIC, 1980

Summary

The knowledge utilization services offered by the EIC are in demand by a variety of individuals and organizations both within and outside the southern New Jersey region. The EIC is responsive to user needs and has a philosophy of never refusing to serve anyone needing services. To a limited extent, the EIC is also proactive in its provision of services. Primarily at the urging of the state department of education, the staff of the EIC will advise districts in areas where they sense the districts have needs. This proactive role takes second-place to the reactive position, however, because of the limitation of staff and other resources. Nevertheless the needs of districts are met. At the end of each school year, the EIC conducts a region-wide needs assessment and uses the information gathered through the assessment in its next year's program planning (EIC, 1979b).

The EIC also maintains excellent records of the services it provides. Thus, it can easily determine whether its services are requested more by some districts than others and more by some types of educators than others. The EIC is also able to document the types of knowledge utilization services most often requested and the specific topics on which services are provided. These records are used frequently, both for a public relations purpose (e.g., when reporting use in annual reports) and for a program planning purpose. Thus, if the records show that a specific district has not been an extensive user of the EIC, the staff will attempt to find out the reasons for this limited use and inform those in the district of specific services that are available. The result has been that at least 80 percent of the districts in each of the counties in southern New Jersey received some EIC services during the 1973-1979 school year (see Table 9)

Table 9

PERCENT OF DISTRICTS IN COUNTY SERVED BY EIC-SOUTH
(1978 - 1979)

<u>County</u>	<u>Percent of Districts Served</u>
Southern New Jersey	
Atlantic County	97%
Camden County	100
Cape May County	87
Cumberland County	80
Gloucester County	93
Salem County	100
Rest of State	
Burlington County *	74
Bergen County	12
Essex County	12
Hudson County	16
Hunterdon County	3
Mercer County	77
Middlesex County	55
Monmouth County	38
Morris County	8
Ocean County	41
Passaic County	15
Somerset County	33
Sussex County	8
Union County	19
Warren County	17

* Burlington County is adjacent to the EIC-S region and was included in the southern region before the opening of EIC-Central in 1977.

III. REASONS WHY THE EIC'S KNOWLEDGE UTILIZATION SERVICES ARE USED

The previous section described the different types of knowledge utilization services that the EIC offers and discussed the use that these services receive. Although the substantive areas on which the services focus may change as local and state needs and priorities change, the three types of services--information retrieval, consultant services, and in-service workshops--have been operating for nearly twelve years, or for almost as long as the center has been in existence. The services, therefore, appear to be stable and, in fact, have been the subject of increasing demand by educational practitioners over this period.

Several explanations for the success of the EIC's knowledge utilization services are possible, and each is discussed separately in this section. These explanations may relate to the actual knowledge utilization services and the processes by which these services are delivered or may relate to the interorganizational arrangement as a whole. Both, however, are important in explaining the extensive use that the EIC's knowledge utilization services have received.

1. The Services Are Responsive to Users' Needs

The EIC was established as a center whose function was to provide needed knowledge utilization services to local school districts. Thus, being responsive to users' needs has been an integral part of the EIC's mission. State priorities compete with local needs to some extent; in those programs supported by basic state funds, for example, the state department would like the EIC to concentrate its efforts on serving those school districts with the greatest need rather than placing equal importance on all requests for assistance. Nevertheless, the EIC continues to meet the needs of its primary users--i.e., local educational practitioners--while at the same time satisfying most of the state's needs for assuring local districts' compliance with state and federal laws and regulations.

The EIC directors currently are working with individuals in the state department to develop a mission statement for the centers and therefore to clarify their service role and their relationship with local school districts and the state. A draft of the statement reiterates the responsiveness theme already prevalent within the EIC. The statement discusses the

position of the state board of education, saying that "the EICs must serve local needs within the context of state, county, and regional goals." Thus, although other considerations come into play when serving school districts, it is the needs of local educators that are foremost.

This responsiveness is evident at the service level as well. The staff of the information retrieval service meet each request for information with some material, even when the search for such material may be extensive. In addition, the staff frequently discuss the problem with the individual making the request, often helping the user to define his or her need more specifically and enabling the EIC staff to find out which topics of information might be useful.

Similar responsiveness to needs is apparent in the other two services. Consultant services and some in-service workshops are designed specifically for the individual making the request. In addition, when a need is immediate, consultant assistance is given over the telephone. In other cases, on-site consultations are scheduled at the user's convenience. For both of these types of services, considerable effort is put into discussing with the user the specific type of assistance and information that would be most beneficial. An evaluation of the service and the quality of the information provided is also asked for when the request for assistance has been met. Any suggestions for improving the service or the written materials that were provided are considered by the EIC staff when designing future services and when seeking additional information to augment their collection of educational products. This enables the EIC staff to be even more responsive in meeting future requests.

The EIC is also responsive to needs in a proactive sense. By anticipating local needs and state priorities, the EIC staff are able to assemble materials that will be useful to local districts. The EIC's special, developmental projects are also proactive. For example, the EIC consultant with expertise in gifted and talented education has received a special state grant to develop a model for counseling gifted students in secondary schools. In instances such as these, where developmental funds are received from the federal and state government, the EIC is producing information and educational products that will be of use not only to local educators, but also to practitioners outside of the southern New Jersey

region and the state. For example, the EIC has already received requests for information and assistance from districts across the country and even from educators abroad.

Finally, the EIC conducts an annual needs assessment. The assessment includes information about the needs and priorities of local teachers and administrators. The survey is analyzed by the staff of the EIC, and programs are designed and scheduled to meet identified needs. Thus, again, the EIC may be viewed as acting proactively. The staff not only respond to requests but also try to project from a variety of sources--ranging from surveys to informal personal interactions--the types of needs that the districts will have in the future.

2. The Services are Credible

The services, in addition to being responsive to the needs of the educational practitioners in the region, are also credible to these individuals. Credibility is established in several ways. First, the services are provided in a timely manner. Requests for information from the information retrieval service, for example, are usually met within five days. Similarly, consultant assistance and in-service training workshops are scheduled relatively quickly, usually within a couple of weeks, and consultant assistance is often provided over the telephone, when answers to users' questions are needed immediately.

Second, users trust the staff of the EIC. This trust results from many of the staff having previously worked in a local school district. They therefore understand the problems and needs of users. Moreover, many have worked in the actual school districts that are served by the center. Staff are thus familiar with the organization of the districts, know many of the teaching and administrative staff as former colleagues, and know the type of students attending the district schools. This experience enables the EIC staff to select information that is most appropriate to the user's particular situation and, as a result, makes the EIC's overall services more credible to potential users.

Third, the information given to users is current and appropriate to their needs. The files of the information retrieval service, for example, are being continuously updated. The most recent information on most educational topics is therefore available. The EIC consultants also keep informed

of new ideas in their particular curriculum or administrative area. In addition, the entire staff keeps informed of all state and federal requirements that school districts must comply with and therefore can provide information not only on what the requirements are, but also on what the districts must do in order to meet these requirements.

3. The Services Are Based on Strong Interpersonal Ties

As noted earlier, many individuals on the staff of the EIC have previous experience as teachers or administrators in the school districts that the EIC serves. A few members on the staff also have worked in the state department of education. Interpersonal ties therefore have resulted from these prior relationships and not only have made educational practitioners more aware of the services that the EIC offers, but also have led users to accept the services that are available. In short, interpersonal ties have encouraged use and have established credibility.

These interpersonal ties exist for many of the EIC staff. The EIC director, for example, began as assistant director of the EIC in 1967 when the center was established and became the director in the fourth year. Except for three and a half years as deputy assistant commissioner in the state department, the director has been in his present position at the EIC since its fourth year of operation. Before his position as director of the EIC, he was superintendent in a district within the southern New Jersey region. The director has lived in the area served by the EIC for all of these years and therefore knows many of the individuals who are now working in the school districts. Superintendents of these districts and others on the district staffs, have well-established ties to the EIC. Several individuals interviewed for this study cited these ties and indicated that, as a result, communication between the districts and the EIC about local needs was especially good. Thus, through informal contacts with educators within the region, the EIC director is able to plan services and activities that will meet specific LEA needs.

Similar interpersonal ties exist among the other EIC staff and individuals within the LEAs. The information retrieval service, for example, has had the same director for its 13 years of operation, and she is well known among local teachers. Many of those who provide consultant assistance

and workshops have also been in the EIC for a long period of time and have, in many instances, come to the EIC from local school districts. The result of this has been that individuals within school districts generally know whom to call for assistance or information on a certain topic and trust these individuals to provide information that is most relevant to their particular need. They are not intimidated by the staff at the EIC, but are encouraged to use the EIC's services.

Interpersonal ties are also maintained with individuals within the state department of education. These occur in part through meetings that are held once a month with the four EIC directors and the deputy commissioner. The director of the EIC also attends a meeting with the six county superintendents in the region each month. During these meetings, state priorities, local districts needs, and the planned and ongoing programs of the EICs are discussed.

Interpersonal networking is also apparent among those on the EIC staff. Although the staff is small enough that communication is relatively easy and occurs continually, the EIC director does schedule a full staff meeting each month and meets with all program directors each week. These meetings are a systematic and formal way of informing everyone on the staff of program plans. In addition, it is a time when suggestions on program design may be solicited and coordination among programs may be emphasized. One outcome of these meetings is that program directors and others within the EIC often refer a user to their colleagues at the center who are involved in other projects that may address that user's need or who may have information that may be relevant to the user's particular situation.

4. The Services Involve Mutual Exchanges

All organizations in the interorganizational arrangements derive some benefit from their participation. However, as the organization from which most users come, the LEAs perhaps benefit the most. The LEAs, for example, may call on the EIC for assistance on any education topic and then receive such assistance at minimal or no cost. The assistance may range from asking for written material on a topic that will be covered in a classroom discussion or asking for consultant assistance on the process of conducting an evaluation of the tenured staff, a requirement of all districts under state law. The LEAs may also use the EIC's printing services for designing,

printing, and reproducing brochures, program announcements, and curriculum materials. All of these services are in demand by the districts within the region, but cannot be offered singly by any district because of cost. The offering of these services through a regional agency, however, benefits all LEAs, because the services are provided in an efficient manner and are offered, usually at no cost, to anyone who requests them.

The districts benefit in several other ways as well. First, the LEAs may receive assistance from the EIC in writing proposals for federal and state funds. This expertise, although absent among individuals in some school districts, is present among many individuals in the EIC, along with the necessary substantive knowledge. Second, the EIC, because of its knowledge of local needs, is able to assemble districts with similar needs and suggest that they form a consortium for the purpose of applying for state or federal grants. Such an arrangement may enhance the quality of the proposal by bringing together individuals with different capabilities and therefore may increase the likelihood of the proposal's being funded. Moreover, the amount of funding that the consortium would receive would be substantially greater than what any district could get on its own, and as a result, the types of activities that could be funded under such an arrangement would be more varied and could operate with greater depth and intensity. Third, districts often receive recognition as having an exemplary program as a result of their being part of the interorganizational arrangement. This occurs when individuals within the EIC suggest that others contact the district for ideas about how to improve a program or for information necessary to adopt the exemplary program or procedure. Because the EIC receives requests from school districts throughout the state and the country, districts in the southern New Jersey region often receive widespread recognition. In addition, the districts with exemplary programs are helping to disseminate their ideas. Fourth, the LEAs, often use the EIC facility for their own programs. This occurs most often for adult education classes.

The EIC also benefits from the interorganizational arrangement. Most importantly, the EIC receives an annual allocation of funds from the state to support a core service program. Although the basic state funds are small relative to the EIC's total budget, these funds do provide the EIC with a needed funding base and with funds to support programs to address

state priorities. Because state law has designated the EICs local education agencies, the EIC may also apply for state and federal grants, and it is from these sources that most of its funding comes.

Finally, the state department benefits from its participation in several ways.¹ First, in exchange for a small amount of funds, the EIC is able to establish a program that is directed toward meeting local needs, but is operated within the context of state priorities and goals. Thus, state priorities are addressed by the EIC services. Second, by designating the EIC a local education agency, the state has permitted the EIC to receive state and federal grant funds, which are used to meet local, as well as state needs. Third, the EIC offers some programs for the state department, such as a program on nutrition education at the regional level. Thus, it uses the EIC to implement some of its own projects.

5. The Services Are a Result of Formal Interorganizational Agreements

Few formal agreements exist for the services that are offered by the EIC. Thus, formal agreements are not viewed as a salient explanation for the success of the EIC's knowledge utilization services. Although an overall "agreement" exists at the organizational level between the four EICs and the state--i.e., that the EIC provide certain types of knowledge utilization services, as specified in the authorizing legislation--this agreement may not be linked to the extensive use that the EICs' services receive.

Where it would be possible to find a formal agreement--e.g., between the EIC and local universities who sometimes collaborate in the giving of a workshop--one finds that no such agreement exists. Agreements with university staff who become involved in EIC programs occur on an adhoc basis and are not formal. Similar agreements with individuals at the county offices and other local educational groups are made as needed.

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Although the benefits to the state department are clear from an outsider's perspective, they may be less clear to those in the department. For example, the EIC's indirect cost rate is set by the state department and is determined by the ratio of administrative and business costs to the EIC's total budget. Therefore, the more state and federal grant funds the EIC receives, the lower the allowable indirect cost rate. This formula serves to penalize an EIC for its ability to obtain categorical funds.

6. The Services Are Used As A Result of Compliance Conditions

This sixth theme was found to be important in explaining the use of the EIC's services. As has been mentioned previously, New Jersey law has imposed several requirements on local school districts, many of which lead the districts to seeking technical assistance from an external source. The T&E law, for example, requires all districts to implement several processes over a five-year period, in order to assure minimum standards in the basic skills. The procedures--e.g., the setting of educational goals, the conduct of a needs assessment, the implementation of remedial programs, and the evaluation of the impact of these programs on children--are in many cases ones that have not been implemented previously. Considerable assistance is needed therefore to achieve the desired results, and such assistance is sought from the EIC, where consultants with specific expertise in these processes and in-depth knowledge of the particular requirements of the state laws are available. When implementation assistance from the EIC staff, the school districts are able to satisfy the requirements of various federal and state laws. Later, if evaluation data show that the districts' programs have not led to improved test scores (or other outcomes on which program success is judged), the district may again seek assistance from the EIC in adapting their existing procedures and programs or in implementing new ones.

Because of the relative recency of the state laws and other requirements affecting school districts, this theme may not have been as salient several years ago as it is today. Moreover, this theme does not explain the use of every service provided by the EIC, because not all services are related to legislated requirements. Nevertheless, the demand for services relating to compliance conditions is significant and is one type of service for which the EIC is well known. In some cases, the user of the EIC for information regarding state requirements has also created a greater awareness on the part of users of the wider range of services offered by the center and therefore has stimulated use.

Problems have resulted from this mix of services as well. Although local demand for services ranges from those having to do with state mandates to those related to the educational program more generally, the state department would prefer the EIC to concentrate its efforts on the former type of service. Moreover, the department would like the EIC to spend any slack

resources (funds and staff time) on services for those districts that have been designated by the department as particularly in need of assistance--i.e., districts with test scores below the minimum standard. Other services, the department believes, should be secondary. Although the center is trying to accomodate this concern by being more proactive in its efforts than it has been in the past, an explicit setting of priorities with respect to the types of services that should be provided and the basis for service delivery has not been established. Instead, the EIC makes a point of responding to all requests for service in a timely manner and without bias.

The absence of an explicitly stated priority that the EIC will give preference to serving high need districts, however, has contributed to criticism of the EIC by some state department staff. In addition, the inability of the EIC to evaluate the impact of its services in terms of improvements in districts' test scores has led some to question the value of the center. Current evaluation data consist of documentation of the high number of users of the EIC and these are not believed sufficient justification for the EICs' continued support. Whether the EIC's annual appropriation is increased or decreased in the next few years may depend, in part, on the extent to which the needs of districts below the minimum standard are served by the EIC.

7. The Services Reduce Conflict Among the Participating Organizations

This last theme was not significant in explaining the success of the EIC's services. In fact, as has been noted, conflict does exist between the state department and the EIC on some issues, and this conflict is occasionally problematic. Nevertheless, the services continue and are used heavily by individuals within local school districts.

REFERENCES

- Assembly Education Committee, Statement to Assembly, No. 1342, Trenton, New Jersey, May 15, 1978.
- Braun, Robert J., "New Graduation Rules Assured of Adoption," The Star-Ledger, January 10, 1980.
- Educational Improvement Center-South, Needs Assessment Survey: Final Report, Sewell, New Jersey, May 1979a.
- Educational Improvement Center-South, Bi-Annual Report, July 1, 1979-December 31, 1979, Sewell, New Jersey, 1980a.
- Educational Improvement Center-South, Needs Assessment Survey: Final Report, Sewell, New Jersey, May 1979b.
- Educational Improvement Center-South, Operations Study, Sewell, New Jersey, January 1980b.
- Gappert, Gary, and Evelyn Ogden, R&D Utilization Proposal, New Jersey Department of Education, Trenton, February 9, 1976.
- Haughey, Charles F. "State Support for Educational Improvement Centers; A Discussion of Issues," New Jersey Department of Education, Trenton, July 20, 1979.
- Mills, Richard P., The Organization of Educational Services and Local School Districts in New Jersey, New Jersey State Department of Education, Trenton, April 1980.
- State of New Jersey, Assembly No. 1342, An Act Concerning Intermediate School Districts and Supplementing Title 18A and Repealing P.L. 1977, c. 120, Trenton, June 29, 1978.
- Wise, Arthur, Legislated Learning, (Berkeley, California: University of California Press, 1979).
- Yin, Robert K., and Margaret K. Gwaltney, Knowledge Utilization Networks in Education, (Cambridge, Mass.: Abt Associates Inc., January 1980).

PERSONS INTERVIEWED FOR CASE STUDY

Educational Improvement Center-South

Mr. Sherwood Wilson
Director

Mr. Arthur Raineer
Assistant Director

Ms. Billie Chambers
Consultant, Basic Skills

Mr. Frank Jansson
Consultant

Mr. Ron Zucca
Director of Communications

Mr. John Dougherty

Mr. Howard Sunshine

Ms. Helen Groff
Director, Information Retrieval Service

Ms. Susanne Richert
Consultant, Gifted and Talented

Glassboro Public Schools

Mr. Steve Kalopos
Superintendent

Mr. Sam Todaro
Assistant Superintendent
for Personnel

Mr. Nick Mitcho
Assistant Superintendent
for Public Instruction

Mr. Ralph Hollenbeck
Principal, Intermediate School

Ms. Mary England
Teacher, Intermediate School

Mr. Myron Servenka
Teacher, Intermediate School

Gloucester Township School District

Mr. James Lilley
Superintendent

Mr. Edward Wolf
Assistant Superintendent, Special Services

Ms. Lucille Gross
Program Director

Mr. William McFadden
Principal

Mr. Nick Sferrazza

Mr. Don Ulrich
Principal

Mr. Ralph Skeels
Teacher

Camden County Office

Mr. Donald Beineman
Superintendent

New Jersey Department of Education

Mr. William Brooks
Assistant Deputy Commissioner
County and Regional Services

Mr. Joe Picogna
Special Assistant

Mr. Clark Younger

Mr. Robert Osak
Acting Director, Title IV-C

Ms. Evelyn Ogden
Research, Planning and Evaluation

CASE STUDY NO. 3:

**THE NORTHERN COLORADO EDUCATIONAL
BOARD OF COOPERATIVE SERVICES**

I. INTRODUCTION

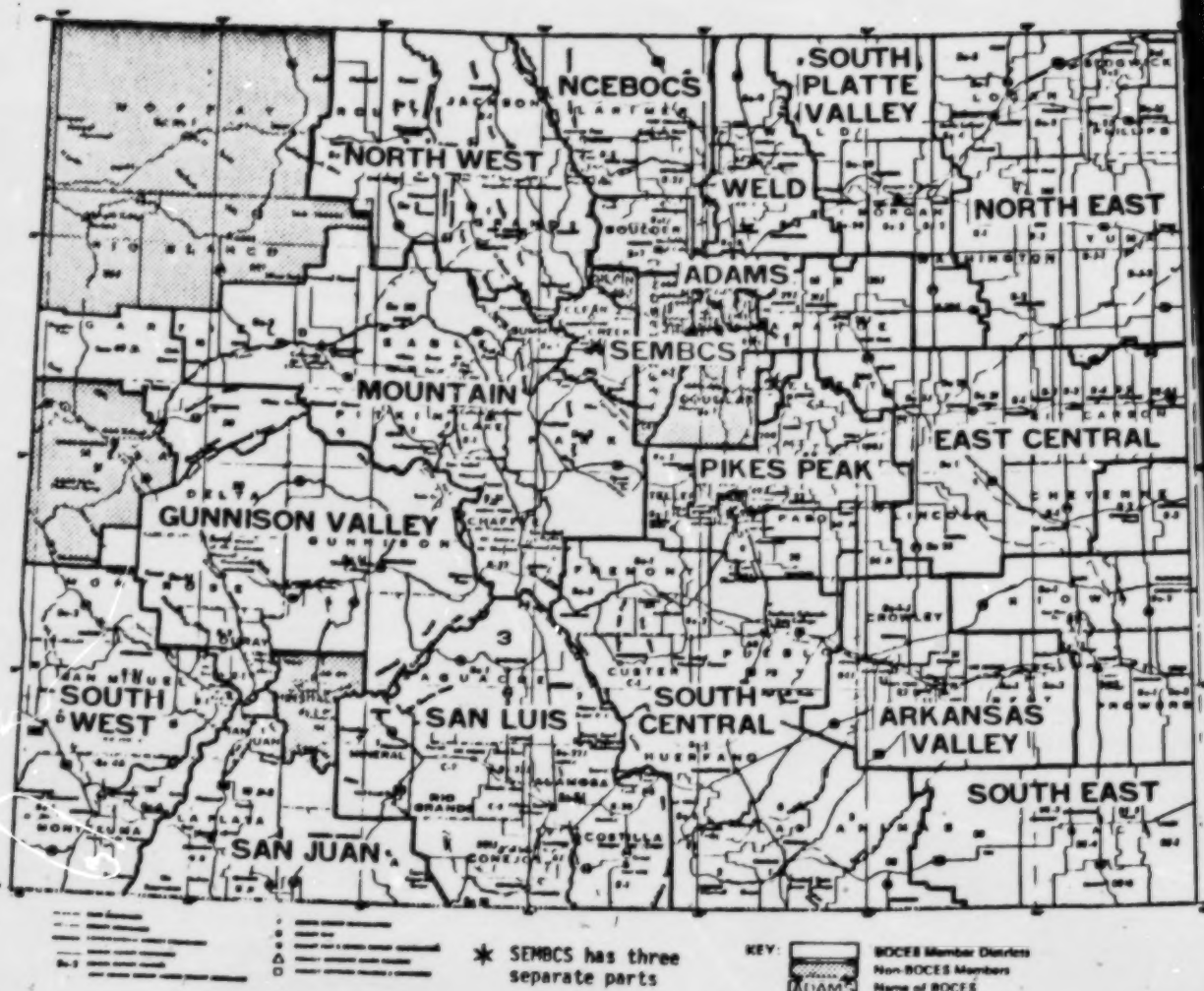
Providing educational services in the state of Colorado is difficult because of problems of geographic distance and accessibility. Colorado is a highly mountainous state which rates eighth in geographic size but only 30th in population among the United States. Nearly 1300 public schools are presently organized into 181 school districts. These districts are part of 13 educational planning regions which encompass all of Colorado's 63 counties. Moreover, 17 BOCS (Boards of Cooperative Services) have been created to serve local school districts on a geographic basis. (Figure 1 presents a map of Colorado, showing the areas covered by the BOCS.) These 17 BOCS provide intermediate services and organization for solving educational problems. However, school districts in Colorado need not be members of BOCS, and, at present, approximately 11 out of the 181 existing school districts are not members.

The BOCS's Place in the State System

Like other boards of cooperative services in the State of Colorado, the Northern Colorado BOCS is of interest because it exists and functions solely at the discretion of the local boards of education which participate in it. The basis for this arrangement is found in the constitution of the State of Colorado itself. The constitution establishes the framework for the public education system, placing the burden of public instruction squarely on the shoulders of the local boards of education. The autonomy of local boards of education is guaranteed by a constitutional provision which specifically prohibits either the general assembly or the state board of education from prescribing learning materials. Additional legislation passed in 1965 further guaranteed the power and autonomy of local school districts by giving them the authority to make contracts with individuals, corporations, Indian tribes, local, state, and federal government agencies, and governing bodies of colleges and universities.

Figure 1

MAP OF THE COLORADO BOCES



A basic problem arises with this autonomy, however, in that it is still necessary for the districts to provide desired educational services at reasonable cost while preserving their own autonomy. For example, the Colorado accountability law focuses on educational improvement, career education, special education and bilingual education. Laws have also been enacted to advance education in the state of Colorado. Both the legislature and the State Board of Education encourage school districts to support basic skills development, and the legislature and school districts are currently developing a process of state-wide testing. The difficulty is that no funds are provided by the legislature to support these priorities and mandates. Furthermore, an amendment to the legislation says the state budget can be increased by only seven percent per year. Thus, although the state's population is growing, the Colorado Department of Education provides little help to the school districts and in general appears to be weak when compared to other state departments of education.

An important consideration, given the emphasis on local autonomy in school districts, is the fact that during the 30-year period prior to 1965, the number of school districts in Colorado was reduced, from 2,000 to the present number of 181. This consolidation effort, led by the state department, did threaten the autonomy formerly enjoyed by the large number of school districts. Among the remaining 181 school districts, there is widespread suspicion that the 17 boards of cooperative services which cluster school districts on a geographic basis may, in fact, only be a step toward further consolidation to a smaller number of school districts which would further erode local autonomy.

It is also important to note that the legislation which permitted the formation of the BOCS was passed as recently as 1965. The act, which was clearly permissive in nature, established guidelines for the creation of BOCS "wherever feasible". The permissive nature of the legislation reflects the emphasis on local school board autonomy. Presidents of two or more local boards of education may call a meeting of interested school boards to gauge the level of interest in forming a Board of Cooperative Services. Only those local school boards that ratify a resolution to organize the BOCS need to cooperate. Since the BOCS functions as a service agency to autonomous local school boards, it may develop new programs only after needs have been identi-

fied and the commitment of member school districts has been established. The BOCS are not, however, formally recognized in any way as being part of the state department of education.

BOCS Structure

Each BOCS has a board of directors comprised of representatives of the local school boards. Each BOCS also has an advisory council made up of the superintendents of the participating school districts. In addition, local school districts also have the power to ratify all the decisions of the BOCS that involve utilizing local school district finances, staff, facilities, and equipment. Because no BOCS has any taxing authority, each one exists solely at the discretion of the member school districts. Even after specific BOCS programs are decided upon, local districts may still pick and choose those in which they will participate. This means that the BOCS must adjust staffing and financing to cater to those school districts that finally agree to participate in a given program. At the same time, even though a district is a member of one BOCS, it may also contract for certain services from a BOCS of which it is not a member. Furthermore, a school district which is not a member of any BOCS may also contract for BOCS services if it so desires. Finally, a school district which is a member of a BOCS may withdraw its membership whenever its board feels that the BOCS is not meeting any of its needs.

The precarious situation of the BOCS is made worse by the fact that the State Department of Education sees the BOCS as an arm of the local school districts rather than as an arm of the State Department. The financial implication of this philosophy is that the BOCS must provide useful services to the local school boards in order to be supported. The state itself provides only \$10,000 a year to each BOCS for its operation. The rest of the BOCS finances must come from state and federal grants, such as those available under the various titles of ESEA, and the fees charged for locally contracted services.

The programmatic implication of this philosophy is twofold. First, member districts may decide not to use the BOCS, but to operate the needed services themselves. In this manner, funds would also be retained within the LEA, and not transferred to the BOCS. Second, even where the BOCS does provide the service, unequal services may result, because those districts

able and willing to pay for the services will receive more of them, whereas the poorer districts may receive very few services. These problems must be confronted each year, when the BOCS director proposes an agenda of possible services. For the Northern Colorado BOCS, specific BOCS ideas have even been adopted by an LEA, to initiate the new service from within the LEA, and not the BOCS. Third, the BOCS must present its proposed agenda on an annual basis. During 1980, most of the Northern Colorado BOCS's was not accepted, thereby making it difficult for the BOCS to plan and allocate its own resources for the coming year. This procedure poses a chronic lack of continuity for the BOCS.

The Northern Colorado BOCS

The Northern Colorado BOCS was established in 1970 by six school districts which formed its initial membership. These districts covered approximately 8500 square miles. The topography of this area ranges from intensively farmed valleys to mountain peaks higher than 14,000 feet. The communities served range from small rural farming communities to fairly sophisticated suburbs of the city of Denver. This BOCS serves approximately 82,000 students and nearly 5,000 certified teachers and administrators, distributed over about 160 school buildings. School buildings themselves range from one-room structures to high schools with enrollments in excess of 2,000 students. The BOCS currently employs approximately a dozen professionals and a dozen clerical staff and is located in the city of Longmont, Colorado, which is approximately 35 miles north of Denver.

The Northern Colorado BOCS's major services include:

- o data processing (both financial and student data);
- o research and evaluation services which are available to member districts or others who wish to contract for them;
- o staff development and coordination;
- o product innovation and curriculum development and distribution; and
- o information retrieval services.

The Northern Colorado BOCS also administers several programs on behalf of the state department, including:

- o the Colorado Migrant Child Identification and Recruitment project;
- o the Migrant Student Worker Transfer System; and
- o the Colorado state facilitator project, which is part of the National Diffusion Network.

(Figure 2 presents an organization chart of the BOCS.) A major observation is that the Northern Colorado BOCS does not provide any direct educational services (e.g., special education programs).

The BOCS is funded by member school districts on a per pupil basis and from a combination of specific program grants and contracts from private, state and federal sources. At one time, in the early 1970's, the activities of the BOCS were strongly supported by federal grants and contracts. Most of these awards have not been renewed or replaced, however. Thus, the current funding sources are proportionately as follows: local district (base support) 15.3%; service contract with member school districts 26.5%; state grants and contracts, 26.4%; service contracts with nonmember districts, 7.0%; federal grants, 12.4%; income from private sources, 12.4%.*

In recent years, the Northern Colorado BOCS has encountered serious budgetary problems. BOCS staff have as a result been reduced, with key positions only filled on a part-time basis. In addition, beginning with the 1980 school year, one of the six member districts withdrew from the BOCS arrangement (though it does continue to contract for individual services), and a second district may also withdraw in the near future.

For the present study, three types of knowledge utilization activities were identified. These included:

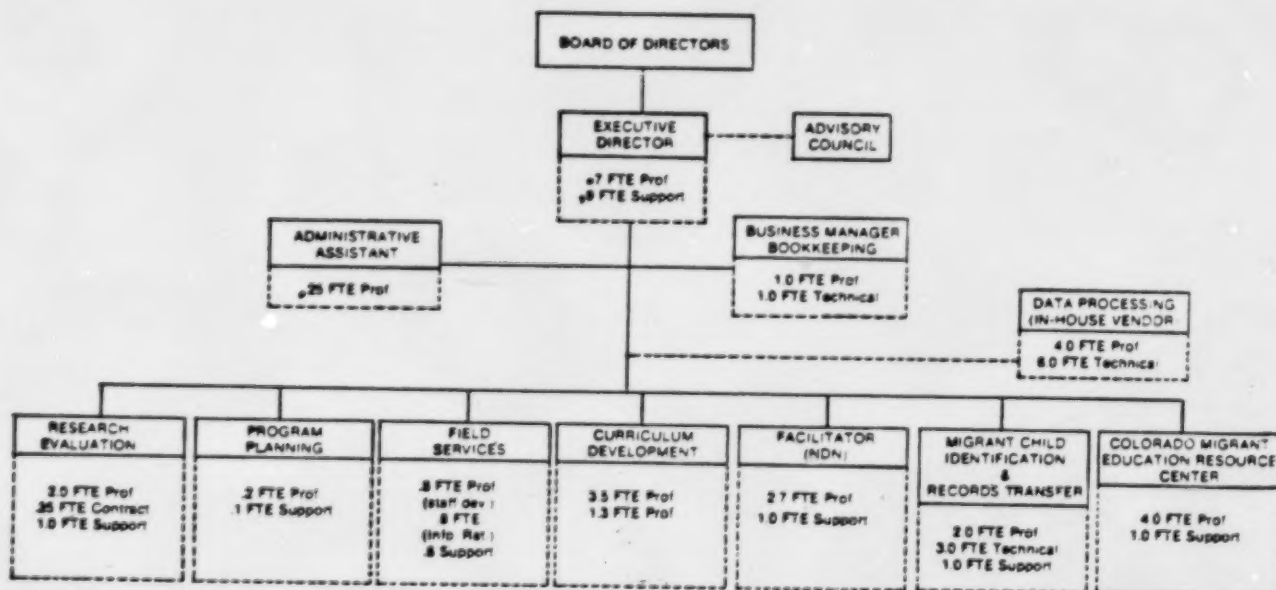
- o information retrieval services;
- o the conduct of workshops and inservice training for staff development; and
- o linkage activities which involve relatively intense and enduring contact between local users of a service and linking agents of some sort.

All three of these types of activities may be found in operation in the Northern Colorado BOCS, and each will be described in more detail in the next section.

* These figures come from the 1979 Annual Report.

Figure 2

NORTHERN COLORADO BOCS ORGANIZATION AND MANAGEMENT
(1979)



SOURCE: Northern Colorado BOCS

II. KNOWLEDGE UTILIZATION SERVICES

General Interorganizational Arrangement

In general, the interorganizational arrangement relevant to the Northern Colorado BOCS knowledge utilization activities includes agencies at four levels. First, at the state level, there is the State Department of Education, particularly the Office of Field Services within the State Department of Education. Also at the state level is the Colorado State Library. At the intermediate level is the Northern Colorado BOCS. At a third level is found the participating school districts and their member schools. Finally, a fourth level includes outside organizations that are peripherally involved, such as a number of local universities whose staff are available for consulting or for some teaching assistance; these institutions also provide graduate credit for teacher recertification or promotion purposes in connection with staff development activities of the BOCS and the local school districts. (The general pattern of interorganizational ties is illustrated in Figure 3.)

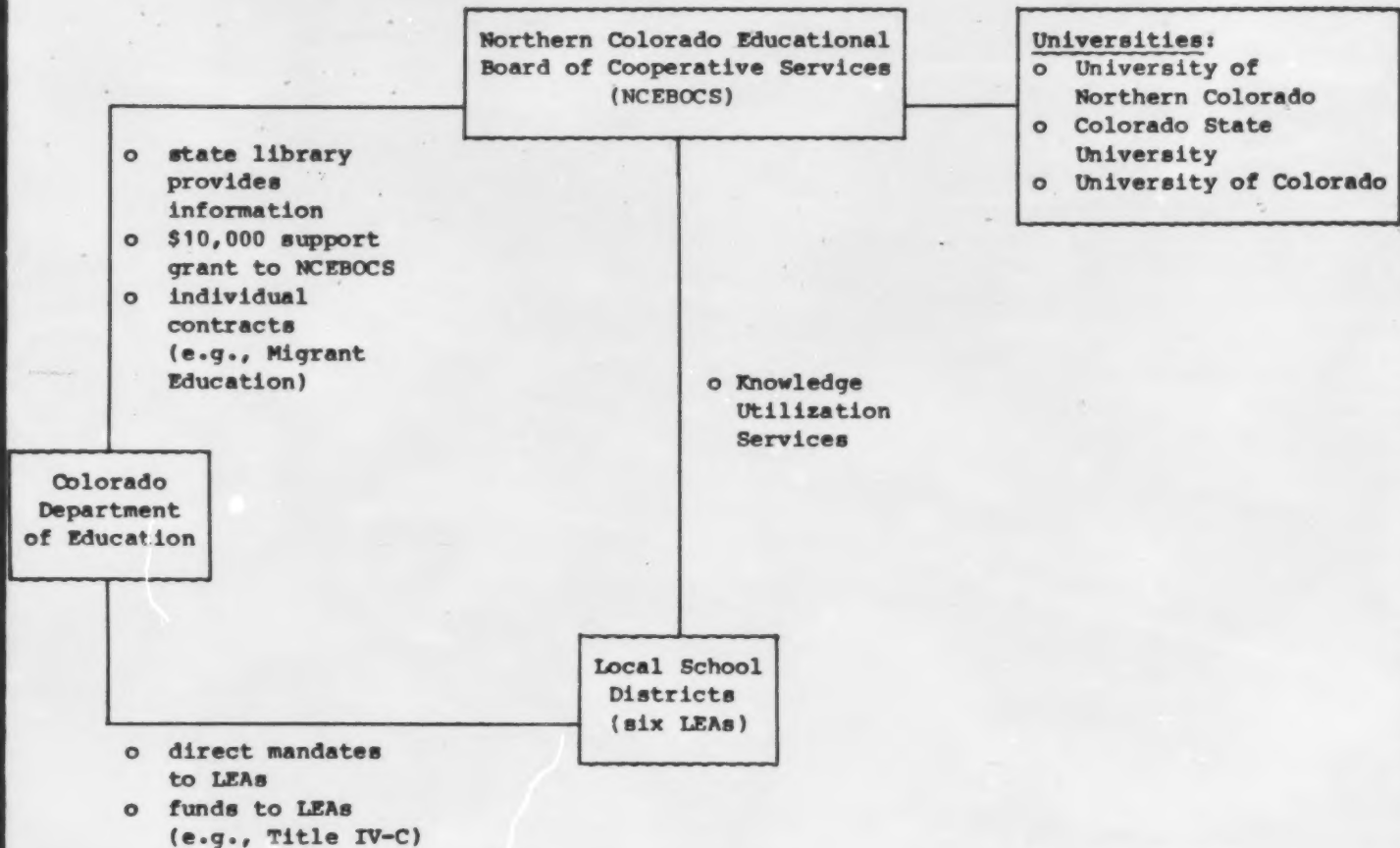
However, the different knowledge utilization activities occur in somewhat different ways and the form of any given knowledge utilization activity varies, depending upon what school district is involved as the user. Therefore, this general arrangement of interorganizational relations is not an adequate basis for describing specific knowledge utilization services. For this reason, the following subsections will describe separately the three knowledge utilization activities studied in connection with the Northern Colorado BOCS. In each case, however, we will also attempt to point out how the three activities are related to each other.

Information Retrieval Service

Background. Between the time the Northern Colorado BOCS was formed (in 1970) and 1972, information retrieval services were supported largely by two grants in the amount of about \$470,000. Then, from 1972 and 1978, the State Department of Education had a contract with the BOCS to do all of the state's reference services, assisted by bibliographic resources from the University of Northern Colorado. However, since 1978, the state library, which is part of the state department of education, has been providing these information resources, supported by an NIE state-capacity-building grant which is known in Colorado as Project Access.

FIGURE 3

ORGANIZATIONS INVOLVED IN KNOWLEDGE UTILIZATION SERVICES



The present BOCS information retrieval service is therefore part of Project Access, which is in the fourth year of its five years of federal funding. In anticipation of the ending of this award, the state department has integrated Project Access with other state activities covering such programs as career education, adult education, and community education, in an attempt to develop a more general linkage network for Colorado.

Although the BOCS continues to provide information retrieval services and does some local needs-sensing, this is a regional service and has a "sunset law" of 365 days like all other BOCS programs. That is, each spring an annual review is conducted and priorities may shift. Again, this reflects the autonomy of the local districts and the need for the BOCS to provide the kinds of services that the member districts want.*

Nature of Services. To enable educational resources to be made available to teachers and administrators, the BOCS employs a Director of Information Services, currently working on a part-time basis of about 75 percent. This individual provides the link between many sources of information and educators who need this information. This includes information on research, evaluation, curriculum guides, teaching strategies and activities, exemplary programs, and administrative support. The related knowledge utilization activities take the form of computer searches of various data bases, journal articles, program descriptions, or references to other resources. Computer searches are provided at no cost and entire documents on microfiche may also be provided at no cost.

Each member school district has identified an individual who is called a "gatekeeper" who first receives all the district requests for information. In some districts, the building principal must approve the request before it goes to the gatekeeper. (See Attachment A for a sample request form.) This is to prevent teachers from using this information service for nonclassroom purposes. The requests then go to the BOCS Director of Information Services, who in turn asks the State library for a computer search, if desired. When a search has been completed, the BOCS sends the results of the request, which may be a computer printout or hard copies of

* We should also note that the BOCS executive director indicated in the interview with him that the IR Service is now the smallest function at the BOCS.

articles, back to the district gatekeeper for distribution to the teacher, administrator, or in some cases the advanced student who made the request. There is no direct contact between the user and the BOCS Director of Information.* Nevertheless, each request for information is individualized by the BOCS director of information services in the following sense: Relevant abstracts are highlighted on computer printouts; journal articles are copied which support the subject being researched; and a letter accompanies each request, describing the contents of the search, how to go about ordering whole documents, and who to contact in the school district if additional help is needed. (Figure 4 diagrams the interorganizational arrangement.)

Three types of information searches are provided: "Computer only" searches in which at least two bases are searched and a printout is produced; "computer and manual" searches, which include the above as well as the manual or hand search for general articles; "manual only" searches, in which journal articles and technical assistance are provided.

On-line demonstrations of computer searches conducted in the school districts have served to publicize this service. In addition, the gatekeepers in each school district, and in many cases the librarians in individual school buildings, produce their own printed materials to announce the availability of the service.

Curiously, although the information referral service and the NDN state facilitator project are serving closely related functions, there appears to be very little formal coordination of these two programs at the BOCS. Interaction between the respective directors of these two programs seems to be irregular. It should also be pointed out that the BOCS seems to conduct relatively little outreach, other than initial on-line demonstrations, related to its information retrieval service, a problem mentioned by several building-level respondents who were interviewed.

Service Outcomes. The BOCS information service seems to be extensively and appropriately used. A recent status report is shown in Table 1, and the data may be summarized as follows: In the year from March 21, 1979 through March 10, 1980, there were 113 computer-only searches, 118 manual and computer searches, and 46 manual-only searches. This means a total of 231

* Such contact flourished prior to March 1979, when the BOCS services were not part of Project Access.

Figure 4

ORGANIZATIONS INVOLVED IN NCEBOCS INFORMATION RETRIEVAL SERVICE

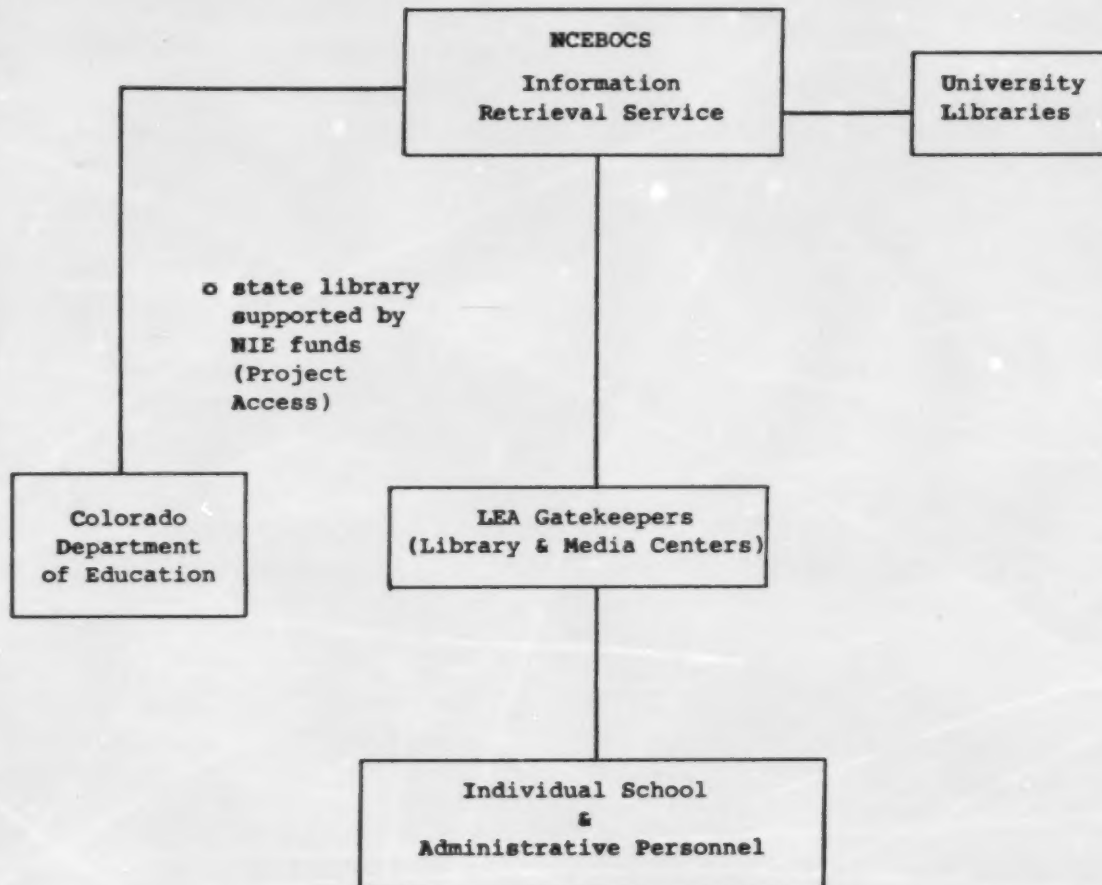


Table 1

Status Report - Project Access
January 8, 1980

Computer searches completed by Northern Colorado Board of Cooperative Services
from March 21, 1979 through January 1, 1980 - 206.

Adams	45
NCEBOCS	40
Boulder	61
Park	8
Poudre	19
St. Vrain	40
Thompson	26

	October 1979	November 1979	December 1979
Computer	33	12	25
Computer & Manual	15	14	25
Manual Only	9	5	0
Human Resources	1	0	1
Adams	15	3	10
NCEBOCS	2	0	20
Boulder	9	12	12
Park	1	0	0
Poudre	0	4	3
St. Vrain	9	4	0
Thompson	8	4	0

SOURCE: Northern Colorado BOCS, 1980

computer searches and 164 manual searches were conducted. Also, hundreds of microfiche and journal articles were copied and sent out to the requestors.

This is significant because the users do have alternative sources for the same information. For example, anyone may use the state library directly. Furthermore, there are three major universities in the area whose facilities may also be used. In addition, school districts and in some cases schools themselves may meet teachers' requests from among their own resources. Finally, teachers may also contact district level specialists in such curricular areas as reading, mathematics, and social studies, whose job it is to remain current on teaching methods and new approaches to programs in their specific curricular areas.

User satisfaction with the service varies. Although the Director of Information Services at the BOCS reported that the feedback that she received was generally to encourage more service, some of the users with whom we spoke at the district level did report some complaints. Complaints about the service take the form of concern over the turnaround time, which runs from 7-10 working days, and also complaints about getting computer printouts as opposed to hard copy. Other complaints dealt with the bureaucratic nature of this service. As the above description suggests, there are many levels through which a request must go. The principal of one of the schools who was identified as an information service user reported that, as the service became increasingly bureaucratized, his use of it has declined. As one overall observation, there is no systematic follow-up on requests, either by the BOCS or the gatekeepers, that would give service providers access to this kind of feedback.

Any interpretation of these outcomes must not overlook the importance of interpersonal relations in this knowledge utilization activity. For example, district library and media coordinators were chosen as the gatekeepers, and this choice capitalized on ties that these individuals had already developed. For example, one had served in several schools in the district as a librarian. Another one of the gatekeepers previously worked in another BOCS as a media director. The extensiveness of the interpersonal network was supported by statements from the teachers who are the users of these services. For example, teachers reported knowing one of the gatekeepers when the latter was at one of the schools as a Title I research person.

The BOCS Director of Information Services has been in her present position for 10 years. (Previously she had been in the Boulder, Colorado school system doing information retrieval work under Title III.) The gatekeepers were already familiar with her before they became gatekeepers. Moreover, the Director of Information Services also has a network of contacts at the state level. These include individuals with the state library system as well as the library at the university in Boulder. These contacts also provide the Information Services Director with work space. In fact, one of the complaints about the Information Service is that the Director of this service is not always reachable, since she is sometimes working at these other sites.

Future Changes. The IR service is in a transitional phase, because Project Access is in the fourth of its five years of funding from NIE. One possibility being explored is to expand the scope of operation to cover such functions as accreditation and accountability for school improvement, which in turn implies the need for expanded training. Current information specialists would be given inservice training so that they could help the local school districts write proposals. In addition, they would get technical assistance from the McRel Education Laboratory in Denver.

At the state level, Project Access has already been integrated with other activities, to develop a more generalized linkage network for Colorado. However, this shift can also pose new problems. As the information service currently operates, the key actors at the BOCS and district level are people with library and media services backgrounds. If the goal of the Project Access staff is to become more closely allied with other curriculum activities such as adult education and community education, the new service will then require curriculum specialists rather than librarians as key individuals. Thus, a network which currently seems to operate very smoothly would have to be restructured.

Staff Development Activities

Background. Although the Northern Colorado BOCS has been engaged in staff development activities and workshops for some time, its staff development program has only been in existence since 1977. As it presently operates, the program is rather small in scope. It consists of four mini-courses and a few workshops. (It is important to note that Colorado has

never had a teacher center award, although several applications have been made.) The BOCS has only a very small staff involved in its staff development program. The Director of Staff Development has only been at the BOCS for one year, and she only works at a 70 percent part-time level.

Nature of Services. The backbone of the staff development program is a set of four minicourses. The first course is called "effective questioning," in which participant teachers learn how to increase the quality and amount of pupil involvement in class discussions. The second course is on developing children's oral language, in which teachers learn strategies to help children learn how to speak and think with more precision. The third course is called "organization-independent learning at the primary level." This involves a set of organizational procedures to instruct small groups of children while the remaining children in the class work independently. Finally, the fourth course is called "higher cognitive questioning," in which teachers are trained to ask higher-order questions and to evaluate the quality of student responses in the upper elementary levels.

The minicourses are operated in collaboration with Colorado State University. In this collaboration, the BOCS handles the logistics and scheduling of courses, and provides usable materials, including materials related to recordkeeping and reporting to the districts. The BOCS also keeps records of participants and makes the reports required by the university, which in turn gives formal academic credit to participants. This credit can be for graduate courses, for purposes of recertification, or for promotion. In general, the BOCS provides the training, sometimes with the assistance of university professors. In addition, the BOCS trains district field coordinators who serve as a liaison between the users of the minicourses and the BOCS; these field coordinators also manage the scheduling of courses within the districts, provide the materials, keep the records required, and make any necessary video and audio equipment available to the participants. There are also well-defined responsibilities for the administrators of the buildings whose teachers are participating in these courses. These responsibilities include supervision of the actual use of courses by the teachers who have taken them.

There are other staff development activities in addition to the minicourses. Currently, the BOCS is involved in developing materials in

several areas--e.g., consumer education, Colorado history, nutrition education, and environmental education. Some of these include inservice training. This is particularly true, for example, of the environmental education program. In addition, there is a Migrant Education Program which also involves some inservice and staff development.* This program revolves around early childhood education, mathematics, reading, and oral language development. Staff development involves implementing and maintaining an effective management system, developing and implementing evaluation (including district needs assessments), training staff in the development of curriculum and materials and providing for extended staff training in the implementation of these curriculum materials. Although providing a variety of staff development activities, the migrant education program at BOCS is not considered part of the staff development program and has a completely separate staff.

It is interesting to note that the BOCS Director of Staff Development operates very much as a linking agent. She helps local school districts prioritize their needs and matches them up with materials and needed training. In addition to making the arrangements with Colorado State University and the University of Colorado for graduate credit in connection with the staff development program, she also makes the necessary contacts with the State Department of Education. Furthermore, she has identified the minicourse contact persons in each school district, who are curriculum people with staff development functions. She fosters interaction between these local school district people, and even university people are beginning to become interested. When appropriate, she calls on this group of staff development people for substantive matters, so she has not only done a great deal for building a network but she also seems to know how to use it effectively. In addition to conducting a series of workshops, she also provides the inservice training for Project Access, with the BOCS Director of Information Services.

* The BOCS has implemented a regional migrant educational resource center to provide technical assistance to member school districts who enroll migrant children. Technical assistance includes management, evaluation, curriculum development and staff development, specifically dealing with issues relating to migrant children. The migrant resource center is supported by a contract with the Colorado Department of Education.

These important networking activities also serve useful functions in connection with outreach. Attempting to overcome low visibility (which results from the fact that the BOCS itself has maintained a low profile over the last couple of years due to financial problems), the Director of Staff Development is now engaging in several outreach activities, including doing presentations for national organizations, developing an organization of staff development people in intermediate educational agencies, and making herself known by attending meetings in local school districts. She has also developed an instrument for assessing local needs for staff development and is now beginning to get calls from schools. She herself reports that she is becoming more active in announcing herself and the services of the BOCS.

Part of the activities of the Director of Staff Development include needs-sensing in the school districts. For example, if a school district calls with a proposed solution to a locally identified problem, she helps screen potential solutions and challenges their identification of the problem. In this regard she interacts extensively with the NDN state facilitator at the BOCS. The state facilitator serves as a source of validated programs, awareness materials, and resources for staff development in connection with the National Diffusion Network. (This will be discussed in greater detail in the next subsection of this report, but we should note that the Director of Staff Development serves an important linkage function in connecting the state facilitator with school districts.) The interorganizational arrangement for the staff development service is depicted graphically in Figure 5.

Service Outcomes. During the 1978-79 school year, 111 participants took the minicourses. However, the participants came from only three of the six school districts in the BOCS catchment area (see Table 2). An evaluation of the minicourse program for the most recently completed school year reported that the minicourses were well-received by most teachers. Frequent mention was made of the clear and well-organized presentation of practical teaching skills. Consequently, plans were being made to continue the minicourse program for the following academic year. However, there are no data to indicate whether these mini-courses have resulted in the implementation of improved classroom practices.

Although these school districts do make use of the minicourses in connection with staff development, the districts tend to have their own

Figure 5

ORGANIZATIONS INVOLVED IN NCEBOCS STAFF DEVELOPMENT SERVICES

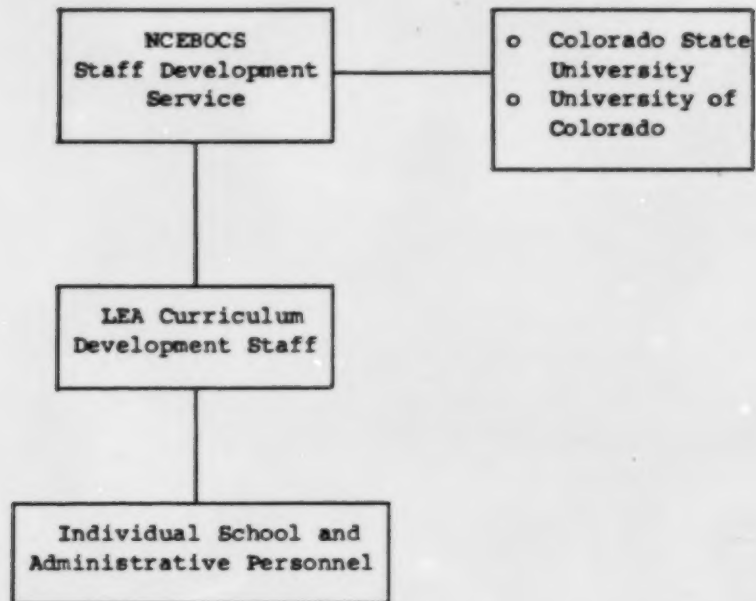


Table 2

SUMMARY OF MINICOURSE PARTICIPATION, SCHOOL YEAR 1978-79

	Minicourse No.	College Credit	Qtr Hrs.	Recerti- fication Credit	District Credit	No. of Partici- pants
ADAMS 12	1	8	24	3	1	12
	8	1	2	2	2	5
	9	6	18			
Totals		15	44	5	3	23
POUDRE	9			5		5
THOMPSON	1	32	96			32
	2	20	60			20
	8	20	40			20
	9	11	33			11
Totals		83	229			83
GRAND TOTALS		98	273	10	3	111

*College credit hours were received from the University of Northern Colorado as Quarter Hours.
 Minicourse #1 - 3 qtr. hrs.; Minicourse #2 - 3 qtr. hrs.; Minicourse #8 - 2 qtr. hrs.;
 Minicourse #9 - 3 qtr. hrs.

SOURCE: Northern Colorado BOCS

programs which are more important and larger in scope. Thus, interaction with the BOCS may be limited to the minicourses or to participation on the staff development committee of the BOCS. Although the NDN state facilitator also serves as an adoption/adaptation resource in staff development, and the state facilitator is located in the BOCS, the BOCS itself does not appear to get credit for this. School district staff coordinators may also go to the BOCS for training in some topic--e.g., needs assessment. Then, however, the coordinators return to their own school districts and provide inservice training for their own school district staff. Thus, the local school district staff may not be aware that the training originated at the BOCS. The district staff development staff also can link directly to universities who will hire them as instructors, so district staff trainees can get college credit without going through the BOCS. Finally, there are district-level subject area coordinators who are trained to develop programs in their respective substantive areas.

The existence of these alternative sources of staff development activities substantially reduces the utilization and the visibility of the BOCS. This is extremely important in a permissive system, because the BOCS depends on district utilization of its services for financial support. The strong emphasis on local school district autonomy, particularly in the case of the larger urban districts that can mobilize the resources to mount effective staff development programs of their own, poses a serious threat to the level of activities of the BOCS.

In at least one of the districts served by the BOCS, teacher utilization of BOCS staff development programs is further threatened by the design of that district's own staff development program. The district has identified ten priorities with measurable standards and developed a skills training program for the teachers which they call the "teaching learning model." This is a diagnostic and prescriptive approach to teaching, and was described by the staff development director of this district as an "opportunity" for teachers. Seventy percent of the teachers must agree on the objectives and on the tests for measurement in relation to these objectives. The school board, in fact, has adopted a resolution on staff development which is job related. Under this resolution, any professional development becomes the responsibility of the staff themselves. The district

only provides staff development related to meeting its own objectives. Training is done by district or university staff, and they have made their own arrangements for credit in connection with this training. The BOCS is not involved. The district is therefore offering training to help teachers follow the teaching and learning approach, but there are occasional complaints that the training is making teaching too mechanical an activity. Furthermore, there is followup on the training: The teachers' use of the training in the classroom is carefully monitored. This is called "clinical supervision". Not surprisingly, the teachers see this as very threatening. The teachers find themselves in somewhat of a double bind, because the training is supposedly voluntary. However, teachers are assessed in terms of the extent to which they meet these 10 district priorities. If they elect to participate in the training, they then have the followup clinical supervision to contend with.

In addition to the philosophical problem caused by the staff development program in this one particular district, another district has more funds to bring in consultants than the BOCS has for its entire staff development program. Furthermore, the importance of the district-level substantive area coordinators as alternative sources of staff development cannot be overlooked. Even in districts that have no full-time staff development program, the coordinators of the different curriculum areas can draw on the fact that they are part of statewide groups. The interaction that occurs in these groups serves to keep them aware of the latest developments in instructional methods and materials. The Denver Public School System, a district not served by the BOCS, also has grants for the dissemination of exemplary programs.

Linkage Activities

For the purposes of this study we have defined a linkage activity as one that involves a continuous contact between a local school or school district and some external agent who serves as a channel for the flow of new educational knowledge. This type of linkage activity may be said to occur in the Northern Colorado BOCS in connection with three programs, although it is difficult to identify specific individuals who are linking agents. Two of the programs were discussed briefly under staff development. These included the linkage activities of the director of staff development and also the

linkage activities that occur in connection with the BOCS migrant education program. However, the most important linkage activity occurs in connection with the NDN state facilitator project, which is located at the BOCS.

Background. The NDN state facilitator project in Colorado began in 1974. Because the project could not be located in the State Department of Education due to state restrictions, the BOCS was selected as the host organization. Thus, when the NDN facilitator project began, the BOCS' efforts tended to be very localized. Thus, the original state facilitator proposal included the networking of BOCS and the development of subnetworks, making the state facilitator serve as a catalyst for the networking of the BOCS.

As a result, the state facilitator is currently connected with several other subnetworks. There are strong, though informal, links with Title I, migrant education, special education, nutrition education, and career education programs. In these cases the state facilitator relates directly to the district-level staff connected with these special programs. In relating to these district level staff, the state facilitator acts as a linker between developer/demonstrator sites and potentially adopting sites. However, in addition to these regular NDN activities, the state facilitator also provides other assistance, for example, helping school districts write proposals for Title IV-C grants.

Nature of Services. School districts may call the state facilitator, who has filled the position since 1974, with requests of at least three different types. First, if districts have identified a need in some curriculum area, they may request information on the types of resources that are available. Second, practitioners may ask for more information on a specific program (i.e., a new educational practice) in which they are interested. Third, they may have seen a specific program in operation and be interested in having assistance for adopting it. When such requests are made, if the state facilitator has funds available to pay for awareness activities, the facilitator may also arrange for training to be done by a program's developer. It is important to note that this generally involves a formal "adoption agreement" which specifies who will pay for what, where the program would be used and what adaptations would be made and so forth. It further may specify the type of evaluation data to be collected and the roles and responsibilities of the developer/demonstrator, the state facili-

tator, and the adopting site. (A sample adoption agreement is presented as Attachment B.)

The state facilitator may also anticipate school needs. That is, the NDN project does not simply wait for a district to make a request for information or assistance. Rather, demonstrations and conferences are held to provide interested schools and school districts with information on the various programs that are available in the NDN program bank. However, the state facilitator has resources that go beyond the nationally validated pool of NDN products.

Understandably, the state facilitator project is tied closely to the field representatives in the State Department of Education, who work with the state facilitator on specific problems. The state facilitator is also closely tied with the Title IV-C program, which began in Colorado in 1974 and supported the facilitator for several years, ending in 1978. As is true in other states, Title IV-C is the main source of funds for adoption grants. In this connection the state facilitator will help a local school district write a proposal for a Title IV-C adoption grant.

The state facilitator is also an important resource within the BOCS. In relating to other BOCS staff, the facilitator reports that he has tried to be an integral part of BOCS activities. When the facilitator applies for grants, the Director of the BOCS must sign the application. The state facilitator also provides resources to the BOCS staff. For example, if a request through Project Access involves the location of curriculum materials, the BOCS director of information services tends to refer such requests to the state facilitator. Also, we have already mentioned the close but informal ties between the state facilitator and the migrant education program. A schematic diagram of linkage activities is presented in Figure 6.

Service Outcomes. Although the state facilitator reports a high success rate (approximately a 75% retention of adoptions and many "turnkey trainees") it is important to note that the state facilitator operates in an environment of diminishing resources. (Table 3 lists the adoptions made, for the entire state, since 1978; only a few of these adoptions have been by districts within the Northern Colorado BOCS, however.) Nationally, the NDN program has reduced its overall funds while also increasing the number of state facilitators and developer/demonstrators who may be funded. Certain

Table 3

NDN PROGRAM ADOPTIONS - BEGINNING AUGUST 1, 1978

PROGRAM	DISTRICT	SITES	AGREEMENT SIGNED	PRE-ADOPTION TRAINING	IMPLEMENTATION
Sacajawea Plan (Great Falls Precision Teaching)	Denver Public Schools	2	X	October 18 November 1, 2, 3	November 1978
Communications Program- Seattle	Denver Head Start	2		October 4-6	October 9, 1978
Rutland Center for Emotionally Disturbed	Adams #14 Peanuts Head Start Denver General	1 1 1	X	October	November 1978
Exemplary Center for Reading Instruction (Salt Lake)	Pueblo *Poudre *Boulder Valley	2 10 2	X X X	September 18-22 August 7-11 October 2-5, 16-19	October 1978 September 1978 November 1978
ACTIVE (New Jersey)	Alamosa 11J Sanford Re-6J Center 26-J Centennial R-1 Monte Vista C-8 Del Norte C-9 Sangre de Cristo North Conejos RE-1 South Conejos RE-10	1	X	December 4-8	January 1979
Project Management Basic Principles & Techniques (Philadelphia)	Durango 9-R (Adoption Grant)	9	X	August 21-25	September 1978
Learning to Read by Reading	Roaring Fork Re-1 (Adoption Grant)	1	X	August 21-25	September 1978
Modification of Children's Oral Language	Denver Public Schools (Adoption Grant)		X	October 2-6	October 1978

Table 3 (cont'd)

NDM PROGRAM ADOPTIONS - BEGINNING AUGUST 1, 1978 (Page 2)

PROGRAM	DISTRICT	SITES	AGREEMENT SIGNED	PRE-ADOPTION TRAINING	IMPLEMENTATION
PEECH	Denver Public Schools	2	X	August 30-31 (Denver) September 11-15 (Illinois)	September 1978 September 1978
Project Success for the SLD Child	Cortez	1	X	October 19-20	November 1978
New Model Me	El Centro	6	X	October 10-11	October 1978
APL	Jefferson Co.	1	X	December 1978	January 1979
Perception +	Adams Co. 1	3	X	January 24, 1979	February 1979
	Air Academy #20	1	X		
	Arickaree SD	1	X		
	*Boulder Valley Re-2	2	X		
	Clear Creek SD	1	X		
	Elizabeth C1	1	X		
	El Paso SD 11	4	X		
	Lamar Re-2	1	X		
	Littleton #6	3	X		
	*Poudre R-1	2	X		
	Sheridan #2	2	X		
	Strasburg 31-J	1	X		
	*St. Vrain Re-1J	3	X		
	Weld Co. #6	1	X		
	West End	1	X		
	Widefield SD 3	1	X		
	Private Schools	1	X		
	Adams Co. #1	1	X	February 28, 1979	March 1979
	*Adams Co. #12	1	X		
	Aurora Public Schools	1	X		
	*Boulder Valley Re-2	1	X		
	Cherry Creek #5	2	X		
	Douglas Co. Re-1	2	X		
	East Central BOCES	1	X		
	Garfield Re-2	1	X		
	Harrison #2	1	X		
	Mesa County #51	1	X		

Table 3 (cont'd)

NDM PROGRAM ADOPTIONS - BEGINNING AUGUST 1, 1978 (Page 3)

PROGRAM	DISTRICT	SITES	AGREEMENT SIGNED	PRE-ADOPTION TRAINING	IMPLEMENTATION
Perception + (Continued)	Washington Co. 101	1	X		
	*St. Vrain Re-1J	2	X		
	Weld #6	2	X		
Project STAM1	Elizabeth	1	X		
	Adams Co. #14	1	X		
	El Paso #2	4	X		
	Dry Creek Elem. (Englewood)	1	X		

* = District within NCEBOCS.

changes in the relationship between the state facilitator and the client school districts have resulted from this situation. For example, the facilitator reports a great reluctance to put his limited resources into diffuse awareness activities. Furthermore, the formal adoption agreement appears to be a relatively recent procedure, one that has developed within the last couple of years. Users of the NDN program have also stated that, although the facilitator and the developer/demonstrators have money available for, respectively, awareness and adoption activities, the state facilitator engages in very serious negotiation over funding sources with the user districts. At the same time, the state facilitator, in helping school districts write grants for IV-C monies, has undoubtedly expanded the funds available for adoptions in various curriculum areas. This has occurred in spite of the reduced level of funding of any given NDN state facilitator itself.

Interviews with users of the NDN services provided further details on this particular knowledge utilization activity. For example, a low-income elementary school has used the NDN facilitator for the adoption of at least two exemplary programs. In the first case, the state facilitator made money available for local school staff to visit a program called HOSTS, which is a tutorial remedial program. The state facilitator helped the principal to incorporate this program into an ongoing Title I program. The state facilitator provided additional money to get the program's developer to come and provide a week of intensive training for teachers and aides. The adoption of this program doubled the number of Title I children that could be served at this school. In another instance, the NDN's state facilitator made money available to send a teacher to Michigan for preschool training. The teacher and his school have now adopted the preschool program. Furthermore, as a result of a presentation done by the state facilitator in Denver, teachers from another school district became aware of the program at this particular elementary school and came down for training by the elementary school staff in the use of one of these programs. The state facilitator provided funds for the teacher and the aide who did this training. Thus, throughout these adoption activities the state facilitator has functioned as a linking agent.

At other schools, the state facilitator has been involved in establishing workshops for training large groups of teachers in connection with a

state college and has brought people in to describe several programs in specific curriculum areas. These presentations were followed by contacts between the developer/demonstrators and the schools, which led to adoptions. The state facilitator has also been involved in the development of an exemplary program, now a validated program in NDN, dealing with school health curricula. The principal of the school where this program was developed has begun working with other school districts, making presentations to identify schools interested in applying for Title IV-C adoption funds. He has arranged to make the presentations on the program. The state facilitator also arranged an in-depth workshop for these interested schools to help them prepare a proposal for a consortium grant. This proposal was initially turned down, but the state facilitator got the consortium permission to revise the proposal. The result was that the proposal was approved.

It is interesting to note that although the state facilitator appears to be extensively used by the school districts which appear in the BOCS, the NDN users almost unanimously stated that they make little or no use of the BOCS. It is also interesting to note that as mentioned above, the Director of Staff Development at the BOCS is beginning to function as a linker, the state facilitator very definitely functions as a linker, and we have already noted that some linkage occurs in connection with the migrant education program. Nevertheless, the BOCS does not have more general linking agents on the staff. Linkage seems to occur on an ad hoc basis in connection with specific programs. Linkage, therefore, as a knowledge utilization activity, appears to be much less conspicuous and more informal than the other knowledge utilization activities at this BOCS.

III. REASONS WHY THE BOCS'S KNOWLEDGE UTILIZATION SERVICES ARE USED

The previous section has described the use of three services administered by the Northern Colorado Educational Board of Cooperative Services (NCEBOCS). In general, the level of use and quality of service fell short of our expectations as far as the exemplary nature of this interorganizational arrangement. For example, that two of the services were headed by part-time directors, and that the third service (NDN) was really a statewide linkage function with few adoptions within the BOCS, suggested that the interorganizational arrangement was not being used to its fullest extent. Continuing budgetary problems and the withdrawal of at least one of the six member districts reinforced this conclusion. Nevertheless, as a case study, the BOCS arrangement provides highly instructive information about knowledge utilization services.

In general, the overall outcome to be explained in this case study is not "why the services are used"; rather, the issue is "why the services are not being used more." In the case of the BOCS arrangement, the services would be used more if they were: 1) more fully supported by external funds, 2) more credible in relation to competing services, and 3) based on stronger interpersonal ties. Less important were the other explanations considered at the outset of the study.

1. The Services Need to Be More Fully Supported by External Funds

The tradition of local autonomy in Colorado has imposed a severe financial constraint on the BOCS interorganizational arrangement: The main source of support must come from local school districts, which are themselves under fiscal pressure (due in part to declining enrollments).

The philosophy underlying the BOCS arrangement has been that services should be responsive to users' needs, and thus that users (local districts) should be able to provide the needed funds. However, the philosophy is difficult to implement when the overall resource pool is being reduced. Allocations for knowledge utilization services must compete with allocations for other district activities, which often have a more visible and direct payoff than do knowledge utilization services.

Moreover, the BOCS's opportunities for obtaining external funds have been minimal, for three reasons. First, the state is committed to a nominal support grant of \$10,000 to each BOCS, and further investments are unlikely. Second, although the Northern Colorado BOCS did, at one time, have several major awards from federal agencies, the current BOCS staff has not been able to replenish most of this funding. In general, Colorado administrators have not been strongly oriented toward applications for federal funds, and Colorado has probably underutilized the existing pool of federal awards programs. Third, the Northern Colorado BOCS does not provide direct instructional services, and therefore does not have access to other programmatic funds--e.g., in special education--that are enjoyed even by other BOCS in Colorado. Such programmatic funds, although not directly targeted for knowledge utilization services, nevertheless enable an organization to enhance its staff development and informational services. This has been true, for instance, in the few cases where the BOCS has been the recipient of state contracts for special services, such as in migrant education. The BOCS Migrant Resources Center has developed an array of activities that, although targeted to a specific type of problem, includes the informational and linkage activities that constitute knowledge utilization services.

In the absence of external funds, the BOCS may be caught in a downward spiral. Each year, the BOCS director develops an agenda of new services to be reviewed by the member districts. The member districts then decide whether such services are desired and if so, must increase their allocations to the BOCS to support the services. With the constrained fiscal conditions, the decision to continue or initiate services has seldom been made; but then, with fewer services being offered by the BOCS, each member district feels compelled to re-examine its existing allocation to the BOCS, occasionally (as in the case of one district last year) leading to a decision to withdraw from the interorganizational arrangement altogether.

2. The Services Need to Be More Credible in Relation to Competing Services

The main competitors for the BOCS's services are the services offered by the local districts themselves. Thus, because of the basic tradition of local school district autonomy in Colorado, school districts have tended first to attempt to provide services by themselves, and only secondarily to seek such services elsewhere. To this extent, any external

organization such as the BOCS will have difficulty responding to users' needs; in fact, if a school district can serve its own needs, there is little opportunity for interorganizational collaboration. When a user group can provide services for itself, any external service is likely to appear less credible. This is because the external group is less familiar with local situations, and will inevitably be perceived as providing less effective services.

Such a situation was evident in Colorado, where the provision of services from the BOCS was exacerbated by the geographic distance among the member districts. If a school is many hours' drive away from the BOCS, the services will be hard to use, familiarity will be minimal, and the services will appear to be less useful than locally-provided services. Not surprisingly, these circumstances can lead to a reversal of roles: The BOCS staff (e.g., staff of the staff development service) participated in the design and implementation of the school district's curriculum development services, and were not clearly identified as BOCS staff. In other words, because the technical skills were relevant, the BOCS staff did collaborate with the local district staff. However, the course was administered by the local school district as part of its curriculum development program, and the matriculators of the course did not necessarily know that the BOCS staff person represented an entirely different organization.

3. The Services Need to Be Based More Heavily on Interpersonal Ties

In two of the knowledge utilization services that were studied, the project directors had been in their positions for several years and had established extensive contacts with member districts. These contacts were reflected by the fact that users often knew these project directors by name and considered these persons to be suitable resources. In the long run, such contacts are important for promoting further knowledge utilization services.

Nevertheless, newer BOCS staff members have had greater difficulty in establishing interpersonal ties with the staffs of the member districts. This was due in part to new BOCS staff members mainly being recruited from organizations other than the member districts, and such staff persons would have to spend a lot of time establishing ties and developing an understanding of local school situations.

One possible reason for this recruitment practice is the differential salary structure between the BOCS and its member districts. Because the BOCS is perceived as a service unit to the member districts, the salary levels for the BOCS staff are considerably lower than those of the districts. For instance, the Director of the BOCS has a salary that is about 30 percent less than that of a district superintendent, and about 20 percent less than that of an elementary school principal in a small school. Similarly, the salary of the Director of the Information Service is about 5 percent less than the average teacher's salary in one of the school districts.

These differential salary rates reduce the likelihood of the BOCS's recruiting a staff person from among its member districts. If such a mobility pattern were possible, however, it might facilitate the development of interpersonal ties, because the staff person would then have already established contacts with potential users.

4. Other Possible Explanations

At the outset of the study, several other explanations for collaborative efforts were identified: mutual exchanges, formal agreements, compliance with external requirements, and reduction of conflict. None of these other explanations appeared important in accounting for the BOCS situation.

Though mutual exchanges were found (e.g., in the staff development service, participants gain course credit and the BOCS gains external recognition for its efforts), their roles were minimal in comparison to the conditions previously described. Similarly, there was one instance of a formal agreement (in the linkage service, "adoption agreements" are developed as part of the Title IV-C application), but the agreement itself did not play a heavy role in enhancing or reducing service utilization. No examples of the other two conditions--compliance with external requirements or reduction of conflict--were found.

Summary

Overall, the BOCS provides all three types of knowledge utilization services and has done so for a period of years. This characteristic led to the BOCS being included in the present study. Upon further examination, these services were found, however, to be underutilized and in danger of further

reductions in service levels. The preceding sections have indicated why these services have worked on such a limited basis, with the major reasons being the limited access to external resources, competition from parallel services provided by the school districts themselves, and difficulties in developing strong interpersonal ties.

PERSONS INTERVIEWED FOR CASE STUDY

Northern Colorado Educational Board of Cooperative Services

Mr. Frank Anderson
Director

Ms. Elise Albright
Director of Information Services

Dr. Raymond Hall
Director of Research and Evaluation

Dr. Robert Ewy
Director of ACCESS

Mr. Craig Christopher
Assistant Director of ACCESS

Ms. Patricia Solberg
Director of Staff Development

Dr. Duane Webb
Director of NDN Facilitator Project

Colorado Department of Education

Dr. David Williams
Regional Field Coordinator

Dr. Charles Beck
Director, Title IV-C

Adams County Schools

Ms. Janice Smith
Director of Media and Library Services

Mr. John Ackelson
Director of Testing and Evaluation

Ms. Cindy Harrison
Staff Development

Ms. Carol Norberg
Teacher, Westview Elementary School

Ms. Sandy Luppens
Principal, Thornton Elementary School

Ms. Sam Thornham
Principal

St. Vrain Valley Schools

Mr. Randy Donahoo
Director of Media and Library Services

Ms. Lis Dorsey

Ms. Gail Toups
Title I Coordinator

Ms. Ivy Gamble
Supervisor of Library Media Services

Dr. Roger Rugg
Assistant Principal
Frederick Elementary School

Mr. Milt Pippinger
Staff Development

Ms. Becky Durham

ATTACHMENT A

Sample Request Form for IR Services

FOR DIMC USE
ONLY

Date of pick-up
from DIMC _____

Date of pick-up
from your school _____

Item # _____



REQUEST FORM FOR INSTRUCTIONAL MATERIAL OR EQUIP.

TEACHER—Please complete the following

1. name _____
2. school _____
3. date of request _____
4. This request is for
☐ AV Equipment
☐ SEIMC Selection
☐ DIMC Software (tapes, filmstrips, etc.)
 (Only one item per form.)
5. The catalog number (if any) of the item I am requesting is ...

DIRECTIONS for Completing This Form

- A. Print Fully and Clearly
- B. Fill out spaces 1-7
- C. KEEP GOLD COPY, SEND OTHERS TO YOUR LIBRARY/IMC
- D. PINK is confirmation, will be returned to your Media Center. YELLOW will accompany delivery.

NOTES TO BORROWER

- A. Films are loaned for two day periods.
- B. Most equipment and other media are loaned for one week periods.
- C. Special exceptions to standard loan periods may be granted due to unique needs.
- D. Loan extensions may be requested one day before due date.

6. The title (or type of equipment) is ...

DIMC RESPONSE
to your request —

Your request cannot be filled ...

not available item withdrawn from collection

damaged/worn out for repair

missing
Your request is granted, item is scheduled for your use on: _____

8. Signature of bldg. Media Spec. _____

7. I want to use this item the following date: _____

but, if not available then, ...

first available date
within _____ weeks of preferred date
other: _____

NOTES

ATTACHMENT B

Colorado State Facilitator Adoption Agreement

Adopter/Adapter District JEFFERSON COUNTY SCHOOL DISTRICT R-1
Adopter/Adapter Site Speech and Language Department
Adopter/Adapter District Contact Person Linda Zimmermann, Speech/Language Supv.
Developer/Demonstrator Project Involved School District No. 1, City and County of Denver

PLAN OUTLINE

Tentative Training Date(s) August 13 through 17, 1979
Number of: staff 6 administrators -- students minimum 6 to be involved in the program
Projected Implementation Date September, 1979

Adopter Section

The adopter agrees to implement the following components of the original d/d project:

- To train six teachers to use the Monterey Language Program.
- To have six teachers implement the Monterey Language Program with a minimum of one student per teacher.
- To use follow-up consultation from the trainers twice during the implementation period.
- To participate in any evaluations required by the Developer/Demonstrator.

The adopter plans to make the following modifications in the original d/d project:

None

Attachment B (cont'd)

The adopter agrees to collect the following evaluation data on the implemented program:

- Those requested by the trainers and developer/demonstrator.

The adopter agrees to provide the following resources for the program implementation (list financial figures if applicable):

Training - none

Materials - none

Equipment - none

Personnel six

Travel - none

State Facilitator Section

The State Facilitator agrees to provide the following services to the adopter:

- \$100 per person for materials
- \$10 per person for computer time
- \$250 per two consultation visits by two consultants totaling \$500.

Developer/Demonstrator Section

The original program developer agrees to provide the following services to the adopter (list funding source):

Training PL-93-380 ESEA Title IV funds

Monitoring and/or other follow-up Consultation as stated above per State facilitation funds.

Materials/Equipment per State facilitation funds.

Review of adopter evaluation design Title IV funds.

Attachment B (cont'd)

The original program developer agrees to provide for the adoption/adaptation described above with the following changes (if changes necessary):

None

JoAnn McElderry
Developer/Demonstrator Project Official

6/19/79
Date

The adopter/adaptor of the d/d project agrees to the commitments described above.

Linda Zimmermann
Adopting/Adapting District Official

6/19/79
Date

The Colorado State Facilitator agrees to the commitments described above.

Duane Webb
Director, Colorado State Facilitator

Date